

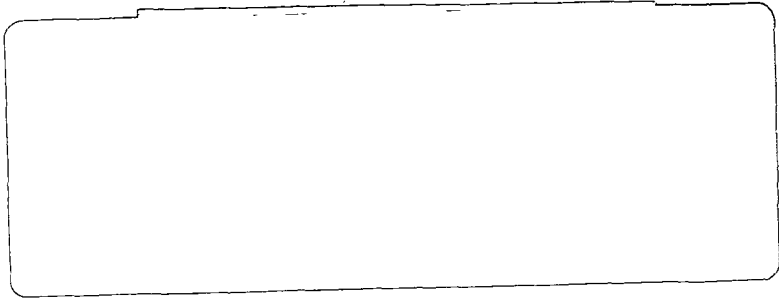
Family Planning Programs: An Evaluation of Experience

SWP345

RECEIVED
WASHINGTON, D.C.

World Bank Staff Working Paper No. 345

July 1979



FILE COPY



Prepared by: Roberto Cuca
Population Projects Department

Copyright © 1979
The World Bank
1818 H Street, N W
Washington, D C 20433, U.S A

The views and interpretations in this document are those of the author and should not be attributed to the World Bank, to its affiliated organizations, or to any individual acting in their behalf

FILE COPY

The views and interpretations in this document are those of the author and should not be attributed to the World Bank, to its affiliated organizations, or to any individual acting in their behalf.

FAMILY PLANNING PROGRAMS: AN EVALUATION OF EXPERIENCE

A Background Study for World Development Report, 1979

The purpose of this paper is to review the evolution of family planning policy and program activity in those countries in which there is now an official family planning policy as well as some program activity, and to discuss the role of family planning programs in promoting declining fertility rates. The events leading to adoption by governments of family planning policy are discussed. Primary emphasis is given to reviewing the role of the private sector in family planning which helped initiate and promote open discussion of family planning; provided the first, limited family planning services; and fostered informational exposure of the general population. These activities, it is maintained, helped to de-sensitize populations to the emotional nature of family planning. Additionally, adoption of family planning policy was influenced to an important extent by the ability of each country to collect and analyze population data as well as to recognize the implications of these data for socio-economic development. Public and private efforts in this regard are discussed. The development of family planning programs in the context of institutional developments and delivery systems is traced. With regard to these, staged changes have occurred in relation to program responsibility, (gradual movement of the program from predominantly private sector responsibility to predominantly public sector responsibility), in service approach (gradual re-orientation of family planning service from being primarily clinic based --clinical approach-- to the use of an outreach approach and most recently an inundation approach), and in service delivery (changes in: types of personnel, types of contraceptives, and response to changing demands for family planning services). A discussion of the dynamic response of policy and program to changes in demand for family planning services (specifically reduced demand) serves as a point of departure to discuss evaluation of the contribution of family planning programs to fertility decline. Evaluation in the strict sense faces significant problems when applied to family planning programs to ascertain their inherent "success" or their role in general in changes in fertility. However, application of the concepts of supply and demand to family planning services provides a qualitative rationale for the importance of both family planning programs and socio-economic development in explaining the apparent reductions in fertility which have occurred. The paper closes with an illustration of the main points discussed through a series of 7 country case studies.

Prepared by: Roberto Cuca
Population Projects Department

Copyright © 1979
The World Bank

1818 H Street, N.W.
Washington, D.C. 20433, U.S.A.

Acknowledgements

Helpful comments on this Working Paper were received from K. Kanagaratnam, H. W. Messenger, Lyn Squire, K.C. Zachariah, V. Jagdish, H.I. Kang, C. S. Pierce, H. M. Jones, and K. V. Ranganathan. Clayton Ajello provided very competent research assistance.

TABLE OF CONTENTS

SUMMARY AND CONCLUSIONS 1

FAMILY PLANNING PROGRAMS: AN EVALUATION OF EXPERIENCE

I. INTRODUCTION 1

II. EVENTS LEADING TO GOVERNMENT ADOPTION OF FAMILY PLANNING POLICIES. . 2

Summary

III. DEVELOPMENT OF GOVERNMENT FAMILY PLANNING PROGRAMS. 13

- Institutional Development
- Delivery Systems
- Policy and Program Responses to Reduced Demand

Summary

IV. FAMILY PLANNING PROGRAMS AND FERTILITY DECLINE 33

- The Problems of Evaluation
- The Decline in Fertility in Developing Countries

V. CONCLUSIONS 47

ANNEX I: Case Studies 54

- People's Republic of China
- Colombia
- Ghana
- India
- Indonesia
- Republic of Korea
- Pakistan

ANNEX II: Country Summary Sheets 88

REFERENCES

LIST OF TABLES

- TABLE 1 Family Planning Activity, Official Policy and Official Program
By Year of Action for 35 Countries
- TABLE 2 Government Family Planning Organization By Time Period for 35
Countries
- TABLE 3 Approaches to Family Planning By Time Period for 35 Countries
- TABLE 4 First and Second Most Accepted Methods of Contraception By
Time Period for 35 Countries
- TABLE 5 Demographic and Family Planning Indicators for 63 Selected Countries
- TABLE 6 Relationship between Level of Reduction in Birthrate and Type of
Family Planning Policy for 63 Countries for the Period 1960-1977

SUMMARY AND CONCLUSIONS

The past 30 years have witnessed an increasing interest in population matters due to the unprecedented increase in the rate of population growth, especially in developing countries. Increasingly, these countries have realized the consequences of rapid population growth for their development efforts and some of them have adopted measures of fertility control. Evidence of success in those efforts was slow in coming, but it is now clear that fertility is beginning to decline. The reasons for the fertility decline are not yet well established, but some groups attribute the decline to the effect of family planning programs while others insist that it is the result of socio-economic development. This paper contends that both sides are correct. By showing how government family planning policies have been adopted and programs implemented, it highlights the importance of these actions on the supply of services. The paper underscores the importance of research, of the multi-approach to service provision, of private groups and of socio-economic development in improving the supply of contraception and abortion.

Events Leading to Government Adoption of Family Planning Policies

Official adoption of family planning policies and programs in developing countries was preceded by a great deal of activity on the part of private physicians and private groups and by much discussion of the rationale for government involvement. The activities of private groups demonstrated that there was a market for family planning and that most of the population was not opposed to the provision of family planning services. Private groups which developed the initial service delivery system and gave impetus to research formed a pressure group to make governments adopt such a policy.

These groups, therefore, have been important in the adoption of policies, although with some variation of degree from country to country.

The activities of private groups, however, were not sufficient to make governments adopt family planning policies. Countries adopted policies only after clearly realizing that their population growth rate was increasing and that excessively high rates of growth would have negative consequences for their socio-economic development. Additionally, policies could be adopted only after the opposition, be it religious or political, had been quieted. Data gathering and research efforts were very important: those countries which had a long tradition of census-taking and adequate research capabilities or received aid in analyzing the results of their censuses were the early adopters of family planning policies. The analysis of data was particularly important in encouraging the adoption of family planning policy since it promoted a recognition of the consequences of population growth. To some extent, this also explains why policy adoption is somewhat related to socio-economic development. Census taking and research usually imply resources for those activities and therefore may explain why proportionally more middle-income countries than low income countries have adopted family planning policies.

Other factors mediated against the adoption of family planning policy in some nations. Certain countries had to overcome beliefs regarding the importance of a large population for development, colonization of empty lands or even a role in world affairs. Others had to contend with political opposition which branded family planning efforts a conspiracy of the developed world against the developing countries, and the religious opposition opposing family planning on moral grounds. More importantly, perhaps, may have been the belief (fueled in part by the interpretation of research results)

that the population problem could be solved by socio-economic development only. The controversy led to considerable pressures from internal and foreign sources for and against the adoption of family planning policies in most developing countries, and these pressures in their turn have either helped or deterred policy adoption.

The existence of only thirty-five developing countries with a policy including fertility decline as an objective is evidence that all the hurdles have not yet been overcome. Most of the countries with policies to reduce fertility are in Asia (seventeen) where the population problem was first realized and where opposition, political or religious, was not so strong. Only nine countries in the Americas have adopted a policy with demographic objectives, perhaps because of the role of the Catholic Church. In Africa only eight countries have adopted a policy with similar objectives, perhaps because the seriousness of the problem is not as yet evident. One country in Oceania (Fiji) completes the list of countries with family planning policies to reduce fertility.

Adoption of policies proceeded slowly. By 1960, only four countries had official policies; by 1964, six more had joined the club; in 1965, five others did so. During the second half of the 1960s thirteen countries adopted family planning policies, and so far only seven countries have done so during the 1970s.

Several factors may be behind the adoption of family planning policies in the thirty-five countries with policies: the activities of private groups, research and data-gathering efforts, and the capacity in some countries to identify their problems and take action linked to the level of socio-economic development. These elements explain in part the absence of policies in many other countries, particularly the poorer ones.

Development of Government Family Planning Programs

The concept of family planning services and, therefore, the programs themselves have changed dramatically since the early programs in developing countries were initiated. These programs faced a number of constraints. Programs had to be incorporated into the particular institutional setup of the country, they had to be designed utilizing the known technology of the time, and they began to operate on the assumption of excess demand. The experience of those countries prompted innovation in the field that was useful in both the countries where these ideas were developed and later on in other countries just beginning family planning activities.

Institutional Development. Family planning activities in most countries have gone through three basic organizational phases in their development. Initially, these activities, which were totally in the hands of private groups, generally did not have demographic objectives and were operated under loose administrative arrangements without much accountability or evaluation.

The second phase, adoption of an official policy by a country, usually led to the formation of a policy-making body, such as a National Population Council. Under this body and for program implementation purposes, there was reliance either on private groups financed by the government or a body in the government, usually within the Ministry of Health, to provide services. In some cases there was an effort at integrating family planning services with health services, but in most cases this did not occur immediately. Integration of services is the third phase, therefore, and usually came only after a categorical approach had proven less than successful. The initiation of activities on the part of governments brought some important changes with it regardless of the organization utilized. In the first place the objective

of fertility decline was clearly defined; secondly, the idea of accountability was clearly established; thirdly, targets were set and evaluation procedures established; and, finally more efforts were initiated to improve performance.

The first official efforts in family planning were relatively unsuccessful. Targets set tended to be over-optimistic; the ready, potential acceptors were already utilizing the services of private groups and the delivery system in existence was not adequately geared to provide services to an unmotivated population. Lack of integration between health services and family planning services was perceived as one of the organizational problems, and on this basis programs have moved increasingly in the direction of integration. More importantly, however, governments began efforts to modify the delivery system.

Delivery Systems. The delivery of family planning services has developed over time from the single service provided on request at a physician's office to the highly complex system in use today in the most developed programs. This improvement in the delivery system has come about from the need to: (a) motivate people to reduce their fertility, (b) inform them about the services available, (c) convert them into acceptance of family planning services and, finally, (d) insure that they become continuing users. Four basic activities have been identified to do that job, namely, motivation, information, prescription and follow-up. These four activities are now characteristic of most family planning programs in developing countries.

Perception of the need to execute those four activities has changed over time and has been the fundamental factor in developing different approaches to the provision of services. Three main approaches to the provision of family planning services have been adopted: (a) the clinical

approach is facility based (including mobile units) and utilizes medical and paramedical personnel to provide information and prescription activities and, in some cases, follow-up activities; (b) the outreach approach is client-oriented, usually implying home visiting, initially for motivational and informational activities, later including follow-up activities, and recently adding the prescription activity; (c) the inundation approach, utilizing commercial shops or lay personnel, has as a basic activity that of resupply and is useful for distribution of contraceptives not requiring prescription or medical intervention. A number of secondary approaches have also been utilized, but the above three constitute the basis of any modern delivery system in family planning.

The above developments can be better illustrated on a chronological basis. In the 1940s and 1950s when private groups initiated the delivery of family planning services, the only basic activities were the provision of information and prescription to already well-motivated persons. Services were provided by a physician and only traditional methods of contraception were available.

Initiation of government activity brought some changes, although not immediately. Early government efforts were patterned after those of private groups. Later on, however, lack of enough clients brought about the need for motivational activity and, still later, the perception of high drop-out rates made it necessary to begin follow-up activities. By the mid-1960s the number of countries with an official policy had reached fifteen; the introduction of the IUD had intensified the need for the clinical approach, but also indicated the need for follow-up activities and therefore the acceptance of the outreach approach utilizing paramedical personnel for follow-up and motivation. More efforts were made at evaluation and research

was intensified to understand the determinants of fertility and to improve the delivery system.

A few more countries adopted policies in the late 1960s. In the delivery system the popularization of the IUD and expanded use of the pill gave more importance to both prescription and follow-up activities which, while emphasizing the importance of the clinical approach, marked also the consolidation of the outreach approach. The acceptance of the condom as a program method also produced the first efforts to provide contraceptives through personnel other than the physician and therefore the initiation of the inundation approach.

In the 1970s doubts were raised about the effectiveness of family planning to reduce fertility because there were no clear signs of fertility decline in those countries which had provided services for several years. The idea that socio-economic development by itself could produce better results was gaining influence and this may have constrained the growth of a number of countries adopting family planning policies. Supporters of family planning were not, however, giving up hope. The activities needed to provide effective services were well established; the approaches to the provision of services were clearly expanded to include inundation and a few countries liberalized the laws on abortion and encouraged the acceptance of sterilization. The increased popularity of the pill and condom, plus side effects produced by the IUD and the absence of appropriate clinical back-up, contributed to the IUD's reduced importance. The modern delivery system, as we know it today, reached maturity and is now widely acceptable by the population in general and by governments in particular.

During the past several years only a few innovations in delivery systems were launched, such as the introduction of a new contraceptive--the

injectable--and the increased acceptance of paramedical personnel to administer the pill and insert IUDs. On the other hand, the first meaningful rewards to the supporters of family planning have been realized. Countries with family planning programs are beginning to show important reductions in fertility, particularly those countries utilizing a multi-approach to the delivery of services and those which have had a policy for some time.

Policy and Program Response to Reduced Demand

The development of family programs have also included a change on the part of governments to the problem of reduced demand. The initial family planning efforts were based on provision of services to clients on a purely voluntary basis. Since the efforts of private groups did not usually have demographic objectives and were limited, they were frequently confronted with excess demand. Governments, trying to reduce fertility and to cover a wide market, found that services available were in excess of the demand. To convince the population of the advantages for the individual and the community of limiting family size, motivational activities were added to family planning programs. This effort, however, was not sufficient to produce the desired reduction in fertility and governments had to adopt other measures.

Four different types of measures have been tried by governments in the search for improved program results. First, they have utilized payments (incentives) for the acceptance or practice of contraception and in a few cases, on an experimental basis, payments for the limitation in the number of births. Second, to discourage large families, they have made legal provisions such as increasing the minimum legal age of marriage, limiting paid maternity leave to only three or four children, charging graduated fees for in-hospital delivery increasing with the number of children a woman bears,

and limiting the number of exemptions for income tax purposes. Third, governments began making more efforts to improve the socio-economic environment and therefore create conditions more conducive to the demand for contraception. Finally, governments have tried to utilize peer pressure to persuade people to practice family planning. In at least two cases, some coercion has been utilized, but in one of them this appears to have contributed to the fall of the government.

The development of family planning programs has been associated with a great deal of frustration, but this frustration has led to more research, with positive results. Only after research helped to promote and test new delivery systems, has assistance been provided to secure acceptance and proper adaptation of new ideas in the field. Research has also, to some extent, helped these interests in family planning recognize that the market for family planning, as any other market, depends on both supply and demand. In this sense, research has been instrumental in expanding the scope of family planning policy to convert it to population policy, including both family planning services to improve supply and legal and socio-economic measures to affect demand.

At least in the research into the delivery system, private groups have played a very important role. They have taken the risk of advancing new ideas, trying them on an experimental basis, discarding them if they were not workable and propagating them when they are effective. Not known for their research capacity, the private family planning groups have acted primarily as demonstrating agents, sometimes developing trial projects and taking the risk of failure. The role of private groups in this work has protected governments against taking that risk themselves and will likely continue to be important in the future.

Family Planning Programs and Fertility Decline

Government family planning programs have been subjected to more evaluation efforts than any other social program. These efforts have not, however, provided satisfactory answers to the basic question, namely, what is the contribution of programs to the decline of fertility now evident in many countries. Several problems of evaluation are responsible for this state of affairs and a possible solution is now within sight.

The importance of evaluation of family planning programs originated with supporters of such programs who wanted to demonstrate to skeptical governments how effective these programs could be. Soon, the problem of the availability of reliable data became evident. Most developing countries did not have good systems of vital registration and many had not even taken a census. This obviously made difficult the measurement of fertility and the realization of changes in this variable. The situation has improved somewhat in this respect, but still is not fully satisfactory. The early efforts at gauging changes in fertility from program service statistics also met with difficulty, because in their efforts to show success some family planning workers did not report data accurately, making this information invalid.

A second problem, even when reliable data were available and fertility changes could be measured, was that of identifying the reasons for the decline. Several factors such as change in age structure, changes in age of marriage and the prevalence of sterility, among others, may affect the birth rate independently of the practice of contraception or abortion. Although some efforts have been made to solve this problem, it is now clear that in countries having large fertility reductions the practice of contraception is usually the most important factor. Considerable research still needs to be done to identify properly the role of each factor in the decline.

The above problems have been complicated, oddly enough, by research efforts into the determinants of fertility. This research has tended to attribute changes in fertility to socio-economic development independent of program efforts. Lately, however, it has been recognized that socio-economic factors are the prime determinants of the demand for contraception and abortion, while program efforts are the basic determinants of the supply of services. As in any other market, supply and demand, jointly and simultaneously determine the market for contraception and abortion. This statement of fact is not to deny that socio-economic development, through its effect on other variables such as the age of marriage, may affect fertility or that program efforts may include measures to increase the demand for family planning services. What it says is that most of the large declines in fertility have been brought about through the practice of family planning and that in this respect both socio-economic factors and program efforts play an equally important role.

More importantly, there is at present enough evidence to demonstrate that there has been a significant reduction in fertility during the last twenty years. Among the sixty-three low and middle income countries with populations of five million or more in 1976 considered in this paper, and containing about 95 percent of the population of the developing world, fifty-one showed a reduction in the birthrate between 1960 and 1977. Twenty-seven of those with a birthrate reduction between 1960 and 1977 showed a reduction of 10 percent or more. Only one of these twenty-seven countries was without a family planning policy (the Democratic Republic of Korea). Among countries with a policy, large reductions in birthrate (10 percent or more) were more common among countries whose policies had a specific objective to reduce fertility than among countries with a policy without a specific objective to reduce fertility. It is only fair to say that, among the sixty-three countries considered, the proportion of countries with specific policies including

demographic objectives increases with the level of per capita income, perhaps because relatively rich countries have a better capacity to develop effective programs. The most successful countries are in general countries where the policy was adopted relatively early and therefore have had some time to develop their programs. They are countries with a multi-approach to the delivery of services, utilizing a wide variety of contraceptive methods and utilizing a variety of governmental and private agencies to deliver those services.

It can be concluded therefore, that both a positive socio-economic environment and a well-developed family planning program have been instrumental in the success of countries in reducing their fertility. These factors are likely to continue to play a role in fertility reduction, especially in view of the fact that it is poorer countries which have not yet adopted policies or, if they have, the programmatic efforts have not been very strong. Indeed, some of the very low income countries have achieved success when they have had strong family planning programs, making the situation hopeful for other countries.

FAMILY PLANNING PROGRAMS: AN EVALUATION OF EXPERIENCE

I. INTRODUCTION

The past 30 years have been accompanied by an increasing interest in population matters around the world because of the unprecedented increase in the rate of growth of population. Increasingly, developing countries have come to realize that continuation of the high rate of growth will make their development efforts more difficult. Subsequent to this realization, several governments have adopted policies and have implemented programs of fertility control. Until recently, the results of those measures did not show positive results on a scale wide enough to assure the world that adoption or intensification of those measures could reduce the rate of growth of population. More recent data, however, have demonstrated a perceptible decline in birth rates in a large number of developing nations. While this has produced renewed optimism for efforts to reduce fertility, there is still some doubt about the reasons for the fertility declines. On one hand, the supporters of family planning programs claim full credit for the decline; on the other hand, some researchers argue that it is the improvement of socio-economic conditions that has brought reductions in fertility. It is the contention of this paper that both sides are correct: bearing in mind that supply and demand act simultaneously and with equal weight to determine the market, socio-economic conditions have increased the demand for contraception and government programs have increased the supply of services. This paper attempts to show how official population programs have influenced the supply of and, in some cases, the demand for contraception. This is accomplished by reviewing the events leading to the adoption by government of

policies and programs in family planning, the development of family planning programs and the evidence suggesting that programs along with socio-economic development contribute to a lower fertility. A concluding section reviews the implications for future program development.

II. EVENTS LEADING TO GOVERNMENT ADOPTION OF FAMILY PLANNING POLICIES

Official adoption of family planning policies and programs in developing countries was preceded, in most cases, by a great deal of activity on the part of private physicians and private groups and by a great deal of discussion on the rationale for government involvement. Initial interest in the provision of family planning services was expressed in some countries as early as the 1920s^{1/} (e.g., India), but service provision was mainly in the hands of private physicians who provided services on request from their own offices to highly motivated persons for a regular fee. The provision of this service, however, was beneficial only to a few persons who were sophisticated enough to take advantage of such services and affluent enough to pay for them. ...

Soon groups of physicians and women social workers, helped in some cases by sociologists, economists and demographers, began to realize that many people would be interested in the services if they were offered on a more open basis and at low cost. This constituted the recognition of a demand and set the stage for an increased supply. Private groups opened clinics to provide information and services in family planning. These services, which utilized a clinical approach, were usually concentrated in

^{1/} For more details see Annex 1.

large urban centers, and were offered on a purely voluntary basis. Physicians were the providers of services; and, in the first efforts, contraceptive methods were very limited because the modern method - pill, IUD and injectable - were not yet developed and the most effective methods of the time - sterilization and the condom - were not yet generally acceptable to society.

The private sector was instrumental in the eventual adoption by governments of family planning policies and programs. Several reasons account for this. First, private efforts, more often than not, demonstrated that there was a large demand for services among the population. Given the limited capacity of private groups to provide services, they were, usually, confronted by excess demand. Second, private groups demonstrated that the population in general was not opposed to the provision of family planning services and that, in fact, the population accepted easily the existence of family planning clinics and encouraged the opening of additional ones. Third, private groups developed the initial delivery system that would become the backbone of most present official programs. The clinical approach utilizing physicians to provide services has been utilized by most family planning private groups, and with important modifications, is utilized today in most government family planning programs. Initial program activities did not include other approaches because, given the excess demand for services, the clinical approach was quite sufficient at the time. Fourth, private groups became the driving force behind research efforts, and although those groups have not been known for their research capability, they have stimulated other institutions to initiate research projects by providing ideas, identifying

crucial areas and in a few cases providing financial support. After government adoption of a program, these private groups have continued their influence on research by introducing new ideas in the field, testing them and providing governments with the results so that those new ideas can be integrated in larger scale programs. Fifth, private groups, through their success, have been able to influence governments into at least considering the adoption of a family planning program in their respective countries. The success of private activity in terms of acceptors, research, and acceptance was certainly basic to the decision by governments to play a significant role in the provision of services.

Countries' decision to adopt family planning programs came usually after a great deal of debate on the need for the provision of services, considerable political and religious opposition and some degree of pressure from both local and foreign groups. The most important problem has been that of identifying the need for services. Private groups had seen the need for services as a means to protect the health of mothers and children and as a way to facilitate exercising the basic human right of people to decide on the number and timing of their children.

For governments, the initial rationale was the rapid growth of the population and the possible implications of this for economic development. Based on this, governments did not consider the possibility of a family planning policy for their countries until they became aware of the accelerating rate of population growth. This first stage only took place when censuses or demographic surveys could demonstrate clearly that the rate of growth in the country in question was accelerating. For some

countries in South and Southeast Asia, this was not too difficult because they had a well established tradition of census taking. By contrast for countries in Africa, South of the Sahara, the lack of demographic data has proven to be one of the main obstacles in convincing governments of the existence of the problem.

Awareness of increases in the rate of population growth has facilitated but not insured the adoption of a government policy. The next step in policy and program development has centered on the debate whether rapid population growth will affect the development process and whether development in itself will not finally bring down the rate of growth without a government family planning program. On the first of these two questions, agreement is already widespread that rapid growth in population does generally affect, negatively, the prospects for economic development. But this agreement was not reached easily; a larger population was seen in several countries as a larger market that would permit the development of local industry and therefore stimulate economic development; a larger population was seen also as a means to colonize empty lands in countries with relative low population density. These views as well as other views claiming that "a large population means more international power, even if it deters development, have now been quieted.

On the second question, the debate still continues. Up to the late 1960's, it was believed in many sectors that widespread provision of family planning services would immediately bring out a large number of acceptors and users and reduce fertility quickly. The fact that this did not happen in countries which had adopted programs early; the beginning of an emphasis on

the study of the determinants of fertility; and the reduction in fertility in some developing countries before programs were officially adopted, (e.g. Republic of China) began to cast doubt on whether family planning programs did have a role to play. Emphasis was then shifted to socio-economic development as the main engine of fertility decline. This conviction reached its peak in the Bucharest Population Conference in 1974. Although much credence is still given to this belief, a more balanced view is now beginning to emerge as economists begin to use economic tools to analyze the market for family planning. They are beginning to see that, in this market as in any other, supply and demand jointly determine the market. Socio-economic development, in a basic sense, determines the demand function; family planning programs, as initially conceived, determine the supply function. The most important question now appears to be whether demand for family planning has to wait for orderly socio-economic development to take place or whether the basic behavior of the population, which affects the immediate variables influencing fertility, can be changed in the absence of more rapid development than is now possible. That this later position is being accepted is evident from some governments' policies to expand the content of family planning programs to include measures specifically designed to change people's attitudes towards fertility and therefore affect the demand function.

Other constraints were ideological and came from both political and religious groups. Political groups argued that family planning was an imposition from industrialized countries which did not want the developing world to develop and compete for scarce resources. The population problem according to this thinkin

would be automatically solved only after social change occurred. Religious groups opposed family planning on moral grounds. Political opposition has been somewhat lessened by family planning efforts in socialist countries such as in the People's Republic of China; and although it has slowed efforts to adopt a policy in some countries, it has not stopped them completely. The religious opposition has certainly slowed the efforts in some countries and stopped them completely in other countries.

The above constraints to the development of a family planning policy are evident in the different positions taken by different countries. Although many countries, covering a majority of the population of the world, have adopted policies including specific demographic objectives, some countries have only gone as far as adopting policies and providing services with the objective of protecting mothers' and childrens' health or only to allow people to exercise their basic human rights, but without specific demographic objectives. In some cases, governments have provided services without officially adopting a policy.

Governments have also been subjected to internal and external influence in favor of adopting a family planning program. The internal influence came from family planning associations and academics in the fields of economics, sociology and demography. They applied their influence through research and teaching. Influence from external sources was sometimes more overt and also more controversial than those exerted by internal groups. External groups usually exercised their influence through research in the country and through their contacts with senior government officials. During these contacts evidence demonstrating the need for providing services was presented and help of-

ferred to get those countries on the way to establish family planning programs.

The development of government policies around the world has been assisted by international donors via research studies, encouragement, technical assistance and financial assistance. The international donors can be classified in three distinct groups, namely: the voluntary private groups, the bilateral agencies and the multilateral agencies. Among the voluntary groups the most important are: (a) the International Planned Parenthood Federation (IPPF), founded in 1952 as a federation of Family Planning Associations which were the outgrowth of some of the private groups in each country; (b) the Population Council, which also began activities in 1952 and has helped research, training and in general the expansion of programs; (c) the Ford Foundation, which in 1952 began supporting research and training in population; and (d) the Rockefeller Foundation, which has financed research, training and experimental programs since early in this century.

Among the bilateral agencies, the most important in terms of financial support have been the United States Agency for International Development (USAID), the Swedish International Development Authority (SIDA), and the Norwegian Agency for International Development. The Governments of Canada, Germany, Japan and the United Kingdom have also contributed substantially to the development of population programs.

The most important multilateral agencies in the field of population are the United Nations Fund for Population Activities (UNFPA) and the World Bank. Both of these agencies began activities in population in 1968. In addition, other multilateral agencies such as UNDP, UNESCO, FAO, WHO and UNICEF have contributed greatly to the population field by providing technical

and other types of assistance.

Table 1 presents a summary of the countries that have adopted family planning policies including specific demographic objectives, showing when activities by private organized groups began, when government supported activity began, when policy was adopted and when implementation of that policy was started. In eleven of the thirty-five countries in the Table, there was some family planning activity by or before 1950. By 1960, twenty-three of these countries had family planning activity, and in at least twelve of those countries there was formal government activity, even if only in four of them (Pakistan and Bangladesh were only one country at the time) was there an official policy. Before 1965, only ten countries adopted an official policy. Of these ten countries seven were in Asia, two in North Africa and one in Oceania. During 1965, five more countries (three in Asia, one in Africa, and one in America) adopted official policies. From 1965 to 1970, the number of policy adoptors grew by thirteen, of which five were in the Americas, four in Asia and four in Africa. Only seven more countries have adopted official policies since 1971, and of these, three are in America, three in Asia and one in Africa. In total, therefore, Asia is leading the way with seventeen countries, America follows with nine countries, Africa has eight and Oceania has one. In terms of coverage, Asia is well ahead - it not only has a higher proportion of its countries with official policies, but those countries are also the largest in the continent. Latin America and the Caribbean follow with a mix of small and large countries. African countries with policies, on the other hand, constitute only a small proportion of the African countries and also cover only a small proportion of the African population.

Table 1

FAMILY PLANNING ACTIVITY, OFFICIAL POLICY AND OFFICIAL PROGRAM BY YEAR OF ACTION FOR 35 COUNTRIES

	1900-	1940-	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
India	X	X	X	G	PS																								
China (People's Republic)									PS																				
Singapore		X	G									P						S											
Pakistan		X			G								P+S																
Bangladesh		X			G*								P+S*																PS**
Republic of Korea													GXPS																
Egypt								G		X					P			S											
Fiji															PS														
Iran						G				X						P					S								
Malaysia															G		PS												
Yunited States																	IG	S				X							
Barbados						G				X								P											
Mauritius			X														G	P					S						
Nepal											X							GPS											
Sri Lanka						X					G							PS											
Turkey														G		X		PS											P
Kenya			X																P		S								
Jamaica	X																	PS											
Dominican Republic												X					X		G		P	S							
Trinidad-Tobago								X												GPS									
Indonesia																			G		PS								
Morocco																			G		PS		X						
People's Republic of China																G		S			P								
Cuba																	X					P	S						
Botswana																			G				GP	S					
Colombia			X										X									G	P						
Philippines												X											GPS						
Puerto Rico	G						X														S		P						
Thailand										X		G											PS						
Mexico											X						G												
Hong Kong	X												G																
El Salvador		X													X						G								
Senegal												X														G		P	
Guatemala																	X												
Vietnam																(North)					(South)								
															X						X								

Source: see individual country summary charts in Annex II

- X Non-Government Sector Activity
- G Government Activity (financial and/or facilities)
- P Official Policy
- S Official Program Activity

* Indicates policy and service program before independence of Bangladesh
 ** Indicates policy and service program after independence of Bangladesh

Adoption of a family planning policy with demographic objectives has not necessarily implied activity in the field on the part of a government and the lack of such a policy has not deterred some governments from providing services. As shown above in Table 1, some countries such as Ghana and Senegal in Africa have adopted policies with demographic objectives, but have not taken effective action to implement those policies. Furthermore, some countries that have adopted policies have taken some time before clearly establishing a program to provide services; Nepal and Morocco fall into this category. Other countries such as Singapore, Republic of China and Hong Kong began encouraging the provision of family planning services long before they had an open policy. Costa Rica and Chile, which have not adopted policies with demographic objectives, have provided services for a long time and have been very successful in reducing their fertility. Pakistan, on the other hand, was one of the first countries to adopt a policy and to provide services, but real success has not been achieved. In most cases, however, the adoption of a policy has led to provision of services within one or two years, and the results of those services have begun to be apparent within another ten years. The cases of the Republic of Korea, Indonesia, Philippines and Colombia are the best examples of this. The failure to adopt a policy, on the other hand, has generally implied the lack of service provision and the consequent lack of positive results. This situation is evident in most countries of Africa and a large part of Latin America.

Summary

Adoption of family planning policies by developing countries only began after the Second World War and has proceeded slowly. Usually the adoption of policies has been preceded by family planning activity in the private sector, be it by individual physicians or by private groups. These activities of the private sector have contributed to the adoption of policies by demonstrating the existence of a need for services, the acceptability of those services by the populations, and the feasibility of a delivery system. Through research and example, they have also put pressure on governments for a clear statement of policy. This, in many cases, however, has not been enough for governments to take an open stand in favor of family planning. Awareness of a high rate of population growth, awareness of the consequences of continuing that high rate for some time and relaxation of the opposition to family planning by political and religious groups appear to be important elements in moving countries toward the adoption of a policy. The adoption has not implied service provision in some countries; in others, the lack of a policy has not been a constraint for service provision; in most, however, policy generally implies service and no policy implies lack of services. Adoption of a policy, therefore, appears to be, in general, a pre-requisite for service provision and for the achievement of a country's demographic goals.

III. DEVELOPMENT OF GOVERNMENT FAMILY PLANNING PROGRAMS

The concept of family planning services and, therefore, the programs themselves have changed dramatically since the first programs in developing countries were initiated. The first programs were faced with a number of constraints including lack of experience. Programs had to be incorporated into the particular institutional set-up of the country, had to be designed utilizing the known methodology of the time, and began operation on the assumption of excess demand. The experience of those pioneer countries was difficult, but it resulted in a number of innovations in the field. These innovations produced better programs in the countries where they were devised and also formed the basis for better initial program development in countries beginning family planning activities later. The evolution of programs over time has probably made the difference in the context of program results.

Institutional Development

Family planning activities in most countries were initiated by private physicians or private groups of concerned citizens. Generally, these private groups operated in a very loose way with few constraints on their activities, without much accountability and without much concern for performance in terms of demographic objectives. The objectives of private groups have been to provide needed services to the communities within certain legal boundaries and with limited budgets. Whether fertility declines were achieved or to what extent they were achieved have not been the province of private groups. Services were provided wherever a market was thought to exist.

If after a time the demand did not materialize, services could be closed or moved without problem.

The initiation of family planning programs on the part of governments brought about some organizational changes. In some cases, governments began by supporting the private groups on the basis that those groups had the experience in service provision and, until the governments could organize their own services, it was better not to disturb the delivery system in effect. Governmental support for private groups brought with it a demand for more accountability on the part of the private groups, the establishment of specific targets to be reached, the expansion of activities to wider areas of the country, and stricter evaluation procedures. To complement this arrangement, some countries also established some form of a National Population Council for policy making and for coordination of the activities of the different private groups providing family planning services. This was essentially the pattern in countries like Mauritius, Barbados, Pakistan and Colombia.

A different pattern was followed by countries such as India, Egypt, Tunisia and Mexico where responsibility for service provision was given to the Ministry of Health almost immediately after policy adoption. This brought about even more government control over use of funds, coverage of the program, target setting and evaluation. Again in most countries there was a semi-autonomous institution such as a National Population Council to formulate policy and coordinate the efforts of the Ministry of Health with those of other institutions within and outside government. In some cases the takeover by the government was not total; information and training

activities were sometimes left in the hands of the private groups because they had more experience, and the Ministries of Health did not want to deal with information campaigns in which they did not really believe.

Assumption of family planning services by the Ministries of Health did not usually imply integration of services until the late 1960s and early 1970s. In some cases, the Ministries of Health provided family planning services as an independent service within a separate division of the Ministry, but without much coordination with other health services. This situation occurred either because the health branch of the Ministry was too busy with health activities or not interested in those services, or simply because the program was not considered sufficiently important to receive high priority. Although using health facilities, this system generally implied additional personnel or additional payments to regular health staff for family planning services rendered.

Regardless of the institutional arrangements made, initial government efforts in family planning were not successful in reaching the targets set for those programs because: (a) the targets had been set on the basis of the limited experience of private groups and were therefore overly ambitious; (b) the most ready acceptors were already practicing contraception utilizing the services of private groups; (c) potential new acceptors resided far away from large urban centers and were more difficult to reach; (d) the integrated public health services and family planning services, needed by many of the potential acceptors, did not really exist; and (e) the Ministries of Health in charge of the services are in most developing countries weak institutions, not high in the priority list of government, and are medically

rather than managerially or economically oriented. As a consequence of the above, the efficiency of government services was not very high.

Becoming increasingly aware of some of these problems, governments pursued a greater integration of family planning services with health services generally and more specifically with maternal and child health services. The administration of family planning services is now coming under the umbrella of the Maternal and Child Health (MCH) division of the Ministry of Health in most countries and family planning services are considered an integral part of MCH activity. Along with these changes, there has been a move toward establishing more realistic targets for the programs, increasing the emphasis of the motivational activity in service provision and identifying the target population more clearly. These changes, plus the important progress made in service delivery, appear to have accounted for the improved results of programs.

Table 2 gives an idea of the institutional development in the countries that have adopted family planning policies including demographic objectives. It shows first the agency in charge of policy making and coordination and then the agency or agencies in charge of implementing the program. In most countries both of these functions are under the Ministry of Health (MOH). In most countries, also, private groups participate in service provision.

Also important has been the inclusion of other government ministries in the provision of services. Ministries of Education have been integrated in the program to provide population education through formal and informal systems to individuals in and out of school. Also Ministries of Defense have

TABLE 2

GOVERNMENT FAMILY PLANNING ORGANIZATION BY TIME PERIOD FOR 35 COUNTRIES

	1950's			1960's			1970's		
	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
India	MOH + (U)			MOH K (S,MOH)				MOH + (S,MOH)	
China (People's Republic)		U K (U)							
Singapore ^{a/}				MOH K (S,MOH)	MOH + (U)			A U (U)	
Pakistan ^{a/}				MOH K (S,MOH)				MOH ^{a/} + (S,MOH)	
Bangladesh				MOH K (MOH)					
Republic of Korea					A K (MOH)				MOH ^{a/} + (MOH)
Egypt				U U (U)					
Finland				MOH K (S,MOH)				MOH + (MOH)	
Iran				A K (S,MOH)				A + (U)	
Malaysia					MOH K (S,MOH)	MOH + ^{c/} (U)			
Tunisia ^{a/}		A K (S,MOH)		U U (U)					
Barbados ^{a/}				A ^{b/} K (MOH)					MOH + (MOH)
Mauritius ^{a/}				U U (U)					
Nepal					MOH K (MOH)				
Sri Lanka					MOH K (MOH)				
Turkey						MOH + (MOH)		MOH + (MOH)	
Yemen								MOH + (MOH)	
Jamaica						A K (S,MOH)			A + (MOH)
Dominican Republic						MOH U (U)			
Trinidad-Tobago									
Indonesia						MOH K (S,MOH)		A U (U)	
Morocco						MOH + MOH			
Republic of China					MOH U (U)				
Ghana						A K (MOH)			
Botswana								U U (U)	
Colombia ^{a/}						MOH mixed ^{d/} (S,MOH)			
Philippines								A K (S,MOH)	A + (U)
Puerto Rico								MOH + (U)	
Thailand								A + MOH	
Mexico								MOH ^{a/} + (U)	
Hong Kong								MOH K (S,MOH)	
El Salvador						A K (S,MOH)			
Senegal								MOH + (U)	
Guatemala									MOH U (U)
Vietnam									U U (U)

Source: see individual country summary sheets in Annex II

^{a/} Denotes countries in which the execution of a national family planning program was simply left in the hands of the family planning association for an extended period of time.

^{b/} Although the responsible body is autonomous, it is a unit of the MOH.

^{c/} Officially, family planning became integrated with the basic health services in the late 60's, however, family planning appears to have remained categorical.

^{d/} The different major organizations delivering family planning services in Colombia use, collectively, categorical and integrated delivery systems.

^{e/} Policy is determined by an autonomous body, program is executed through the MOH.

A Autonomous institute, board, or council etc. is responsible for family planning and program implementation; this body is accountable directly to the head of government and is not part of the Ministry of Health.

MOH The Ministry of Health or a division thereof is responsible for family planning policy and program.

K Family planning services are offered categorically in relation to health services.

+ Family planning services are integrated with the basic health services.

(S,MOH) Family planning services are provided through special facilities (S) such as any non-government clinic (i.e. family planning association clinics) and through facilities of the Ministry of Health (MOH).

U Information unavailable.

been utilized for informational activities to servicemen and their families; Ministries of Information have been charged with both motivational and informational activities; and other ministries, such as labor and rural development, have been utilized to provide help for the activities of the Ministry of Health in general and of family planning in particular. This multi-approach to the programs may also account for part of the favorable results of some programs.

Delivery Systems

The delivery of family planning services has developed over time from the simple services provided on request at a physician's office (characteristic of countries without official programs and of those countries pioneering family planning) to the highly complex system in use today in the most developed programs. Gradual evolution has included changes in the approaches utilized, changes in the activities to be executed, changes in the personnel executing those activities, and changes in the contraceptives available or utilized. This evolution and the increase in knowledge it has brought have been motivated by low program performance. The consequence of adopting the new knowledge in country programs has usually meant better performance. Once family planning policies have been adopted, countries have at the same time tended to adopt current expertise in the delivery of services. It is useful to review the development of that expertise in a chronological way rather than in a functional or geographic way.

In most social environments, the population is divided among five groups with regard to family planning. The persons in one of these groups are completely unconcerned about family planning and do not have any

reason or motivation to control fertility. This group of persons is likely to be uninformed about the availability of services and is obviously not practicing family planning. Persons in another group are motivated to practice, but unaware of the services available and are therefore not practicing family planning. Persons in the third group have already acquired the necessary information, besides being motivated, but have not taken the step of initiating practice of family planning. The fourth group is made of persons who have accepted a method of contraception, but weaknesses in their motivation or in the supply system place those persons at a high risk of stopping practice or have already stopped them. Finally, the fifth group people are active users of family planning. With some variations and subject to changes in local circumstances, the above pattern is found in most developing countries today.

A comprehensive population program with the objective of reducing fertility must include all the necessary activities to move a large proportion of the population exposed to the risk of pregnancy toward the fifth group. There are four distinct activities that can be carried out to achieve that objective and which move persons successively from the first to the fifth group. These are motivational activities, informational activities, prescription activities (including first provision) and follow-up (including resupply) activities. Those countries which are seriously concerned about their population problems have comprehensive programs including the four activities.

The perception of the need to execute these four activities has changed over time and has been a dynamic factor in developing different

approaches to the provision of services. Three main approaches to the provision of family planning services have been developed on this basis, namely, the clinical approach, the outreach approach and the inundation approach. The clinical approach is facility based (including mobile units), and utilizes medical and paramedical personnel providing information and prescription activities and sometimes follow-up activities. The outreach approach is client oriented, usually implying home visiting. Initially the only activities of this approach were motivation and information; later on, it encompassed follow-up and, beginning in the early 70s, it included prescription of pill and insertion of IUD. The inundation approach, usually utilizing day personnel or commercial shops has as basic activity that of resupply and is useful only with contraceptives not requiring prescription or surgery. A number of secondary approaches also exist. This classification of approaches is not as clear cut as one would like it to be, but constitutes a rational division of the numerous ways that have been devised to provide services.

The development of the three basic approaches has been determined to a large extent by the availability of different methods of fertility control and legal limitations in respect to their prescription, provision and use. Development of new methods of fertility control, improved safety of these methods and improved training, and supervision of workers to prescribe and distribute some of those methods have made possible the arrival of the inundation approach, and therefore the provision of contraceptives on a mass basis.

In the 1940s and 1950s when the first efforts at providing family planning services began, most of the clients were highly motivated persons

who requested the services completely voluntarily and required only informational and prescription activities. The high degree of motivation of those clients made it unnecessary to provide either motivational or follow-up activities. The approach utilized at that stage was clinical; services were provided by a physician in his own office or in a family planning clinic belonging to a private group. Contraceptive methods were very primitive compared to the ones existing today: pill, IUD and injectables had not been developed sufficiently for commercial use, the condom and sterilization were perceived as not acceptable to the population, and abortion was illegal as it still is in most countries. The efforts were, however, very successful in meeting their objective - the provision of a service. More often than not, the demand met or exceeded the supply of services.

Initiation of family planning activities by governments did not immediately bring a change in the above pattern. It was only after some time that governments, having established nationwide programs, realized that there was not sufficient demand for the services and that motivational activities were of the utmost importance if the services available were to be utilized and the program targets achieved. The idea of changing people's attitudes toward family planning focussed on the use of mass media and field workers to convince people of the advantages of low fertility for both the individual and the society. Also, the realization that clients accepted the practice of family planning, but did not remain long as users pointed out the need for follow-up activities to keep the clients motivated and resupply them when necessary. The clinical approach, without many changes, continued at that time to be the basic approach to the delivery of services, especially in

countries which (i.e. India) began to provide sterilization services, where the clinical approach is most important. Finally, for the popularization in India of sterilization, no new contraceptive methods were introduced through the 1950s. In the early 1960s, the IUD began to be used in Pakistan and Hong Kong. Physicians continued to be the primary providers of services, but now with the help of less well-trained people to do some motivational and follow-up work, and the addition of several forms of mass media for motivational purposes.

The mid-1960s were characterized by many changes in the delivery of family planning services. The number of countries having adopted family planning policies doubled. Secondly, there was an intensification in the use of the clinical approach with the popularization of the IUD and initial utilization of the pill. Thirdly, the outreach approach began to be accepted for the provision of motivation and follow-up activities. Fourthly, the utilization of paramedical personnel for face-to-face motivation and follow-up activities became acceptable, making it possible to extend service while saving the time of medical doctors for purely clinical activities. Finally, governments became more conscious of the need for evaluation and the identification of the weaknesses in the delivery system that made difficult the achievement of targets. This awareness gave importance to evaluation efforts and increased the number of experimental efforts with the idea of finding ways to improve the delivery system.

The number of countries adopting family planning policies almost doubled again by the late 1960s. At the same time, renewed efforts were made in the fields of evaluation and research to identify the causes of fertility

decline in some countries and the causes of program failure in others. The delivery system also changed markedly during these years. The prescription activity increased in importance because of the large scale introduction of the oral contraceptive. Regulations in most countries established that this new method could be prescribed only by physicians after appropriate medical examination. The increased importance of the IUD and the introduction of the oral contraceptive also made follow-up activities even more important than before. This was especially true if the programs were to avoid the problem of the acceptance-drop-out-and-reacceptance cycle which would absorb a large part of service provision resources. While emphasizing the importance of the clinical approach, the above changes also brought the consolidation of the outreach approach with efforts aimed at increasing motivation, the dissemination of information and referral of clients to the clinic, and the first attempts to deliver contraceptives through personnel other than physicians. The increasing acceptance of the condom at this time made it possible for family planning workers to deliver supplies door-to-door and for shops to dispense them.

By 1970 there were serious doubts about the prospects for reducing fertility decline through the provision of family planning services alone. Changes in fertility were not yet observable in most of the countries that had provided services officially for several years. The idea that socio-economic development by itself was the reason for fertility levels was taking shape and this idea continued growing during the early 1970s to reach its peak at the World Population Conference in Bucharest. The defenders of family planning were not, however, giving up hope. Although there were not many

new additions to the club of countries with official family planning policies, there was a high level of activity in the implementation of service provision.

The activities needed to provide effective services were well established. The approaches to the provision of services were expanded to include inundation, based on increasing acceptance of the condom and on liberalization in the prescription requirements for the pill. Countries like India, Sri Lanka and Jamaica made well organized efforts to commercialize the sale of condoms. A few countries liberalized the grounds for abortion and began programs to encourage more widespread acceptance of sterilization. A few countries established telephone answering services to provide information on family planning and the mails began to be utilized for the resupply of contraceptives. The great popularity of the pill and the condom, along with the many side effects of the IUD and the need for clinical back-up for this method, began to reduce the IUD's relative acceptance as the principal program method. The modern delivery system as we know it today had reached maturity and was widely acceptable by the population in general and by governments in particular.

The last few years have seen few dramatic changes in the delivery system but have provided the first meaningful rewards to the defenders of family planning programs. In terms of the delivery system, the inundation approach of making contraceptives available through all possible channels is now accepted for both orals and condoms. A new contraceptive, the injectable, is now in use in a number of countries and several countries are utilizing paramedical personnel rather than physicians to insert the IUD. From the point of view of results, the evidence now available points to a reduction in

fertility in a large number of developing countries, with particularly important reductions in those countries where multiapproach family planning programs have been in action for several years. That the programs have made a contribution to fertility decline will be the subject of Section III of this paper.

The development of approaches to the delivery of services by country is illustrated in Table 3. The popularity of each contraceptive is illustrated in Table 4 which shows for each country with a family planning policy, including demographic objectives, the two most popular contraceptives during each period of time.

Policy and Program Responses to Reduced Demand

Private efforts at providing family planning services before governments adopt an official policy are usually insufficient to cover the demand for those services. Governments, on the other hand, find that once their services are provided nationwide, it is difficult to obtain enough clients to use those services. The excess demand confronted by private groups has often been a convincing reason for the establishment of government efforts, but to the disappointment of government that ready excess demand has been covered with little effort. When the first official family planning efforts were established, the excess demand which was evident before the initiation of government activity led to the setting of large targets. Failure to reach these targets led to criticism of government efforts. In comparison governments adopting policies more recently have been cautious in setting targets

TABLE 3

APPROACHES TO FAMILY PLANNING BY TIME PERIOD FOR 35 COUNTRIES ^{a/}

	1950's			1960's			1970's		
	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
India	C			CM			O	I	
China (People's Republic)		CO							
Singapore					C		O		
Pakistan					CO		O	I	
Bangladesh				CO					
Republic of Korea				C	O		I		
Egypt		C					I		
Fiji				C					
Iran						CO		CM	
Malaysia					C		CM, I, O		O
Tunisia					C		OI		
Barbados					C				
Mauritius					C		O		
Nepal					C	OI		O	
Sri Lanka					C, CM, O		I		
Turkey					C, CM		OI		
Kenya						C, CM	I		
Jamaica					C		OI		
Dominican Republic						C	O		
Trinidad-Tobago						C			
Indonesia						C	O	I	
Morocco						C			
Republic of China			C	O			I		
Ghana						C	O	I	
Botswana							C, CM, O		
Colombia						CI	OI		
Philippines								COI	
Puerto Rico						C		CMO	
Thailand							C, CM, O	I	
Mexico							CO		
Hong Kong							CO		
El Salvador							C, CM, I		O
Senegal								C	
Guatemala								C	
Vietnam									

Sources: see individual country summary sheets in Annex II

^{a/} Where any letter appears twice for a country, this indicates re-instatement of the approach after a period of diminished emphasis of that approach in the government program.

C Clinical Approach
 CM Mobile Clinics
 O Outreach Approach
 I Inundation Approach

TABLE 4

FIRST AND SECOND MOST ACCEPTED METHODS OF CONTRACEPTION BY TIME PERIOD FOR 35 COUNTRIES

	Pre-1960	1960's			1970's	
		Early	Mid	Late	Early	Mid
India	S/T	S/T	IUD/S	S/IUD	S/IUD	S/IUD
China (People's Republic)						
Singapore			O/IUD	O/Ab	O/S	O/Ab
Pakistan		IUD/S	IUD/S	IUD/S	IUD/S	O/IUD
Bangladesh		IUD/S	IUD/S	IUD/S	IUD/O	O/IUD
Republic of Korea		IUD/-	IUD/S	IUD/O	IUD/O	IUD/O
Egypt			O/IUD	O/IUD	O/IUD→IUD/O	O/IUD
Fiji						
Iran				O/IUD	O/IUD	O/IUD
Malaysia			O/IUD	O/S	O/S	O/S
Tunisia			IUD/-	IUD/O	IUD/O	IUD/O→O/IUD
Barbados			O/IUD	O/IUD	O/IUD	O/IUD
Mauritius			O/-	O/-	O/-	O/-
Nepal			IUD/O	O/S	O/S	O/S
Sri Lanka			IUD/S	IUD/O	O/IUD	
Turkey			IUD	IUD/O	IUD/O	
Kenya				IUD/O	O/IUD	O/IUD
Jamaica			IUD/O	O/IUD	O/IUD	O/IUD
Dominican Republic				O/IUD	O/IUD	O/IUD
Trinidad-Tobago					O/IUD	
Indonesia				IUD/O	O/IUD	O/IUD
Morocco				IUD/O	O/IUD	O/IUD
Republic of China				IUD/O	IUD/O	IUD/O
Ghana				IUD/O	O/IUD	O/IUD
Botswana					O/IUD	O/IUD
Colombia			IUD/O	IUD/O	IUD/O	IUD/O
Philippines				O/IUD	O/IUD	O/O→IUD/S
Puerto Rico					O/IUD	O/S
Thailand				IUD/S	O/IUD	O/S
Mexico					O/IUD	IUD/O
Hong Kong			IUD/-	IUD/-	O/IUD	O/S
El Salvador				IUD/O	O/IUD	O/IUD
Senegal						
Guatemala			IUD/O	IUD/O	O/IUD	O/IUD
Vietnam						

Source: see individual country summary sheets in Annex II

T Traditional
O Orals
IUD Intrauterine device
Ab Abortion
S Sterilization
- Indicates that no other single contraceptive method constitutes more than 10% of total contraceptive use

and therefore more successful in achieving them.

The efforts of private groups have usually been concentrated where the demand for services is large - generally in urban centers. Failure by private clinics to reach their objectives may cause the closing or moving of the clinic to a more suitable environment. The government, on the other hand, is expected to make services available even in places where the demand is small. This is of course an inefficient way to operate. To solve the problem and help achieve desired demographic objectives, governments have adopted several measures. The first and most important one (as mentioned earlier) was the effort to develop a better delivery system by giving importance to motivation activity. Other measures included the introduction of new contraceptives in the program as they became available, utilization of an increasing variety of personnel to provide services and mass media for motivation and information, and expansion of the approaches to include clinical, outreach and inundation as many government programs are doing at present.

Acceptance of family planning was initially allowed to operate on a purely voluntary basis. Services were provided only on request with no effort to convince anybody to practice contraception or reduce their fertility. The introduction of the motivational activity as part of programs moved those programs a shade away from pure voluntarism. By trying to convince potential clients of the benefits of low fertility for themselves and for society in general, the idea of pure voluntarism was being abandoned. No objection could be raised to the use of motivation simply because demand for any service, product or even ideology depends on some type of motivational effort. Motivational activities have not, therefore, been considered in any way coercive.

Program improvements, including motivational efforts, have not been sufficient to increase the practice of contraception and reduce fertility to the level and within the time framework desired by many governments. Consequently, four types of other measures have been adopted moving government policies from the initial limited scope of family planning policies to more comprehensive population policies.

The first of those measures is the provision of incentives. Incentives types are numerous. Short-run payments for acceptance or practice of contraception ~~these~~ have been in the form of small amounts of money or inexpensive gadgets sometimes openly referred to as payments and at other times as compensation for costs incurred while receiving services. Compensation for work time lost has been an incentive utilized in India. Long-run incentives have also been utilized, but only on an experimental basis up to now. These long run incentives are more in the form of prizes for achieving low fertility. Educational certificates in the Republic of China and savings accounts in Tea Estates in India, both examples of long-run incentives, were credited to women during their childbearing years but redeemable only at the end of them and varying in value according to the number of children delivered.

The second type of measures consist of legal provisions to discourage large families. Examples of this type of regulation are: (a) the increase in the legal minimum age of marriage adopted in many countries, as for example in the Republic of Korea; (b) limitation of legal paid maternity leave for women workers to three deliveries as in Singapore and Ghana; (c) limitations in tax exemptions to only three or four children as in Korea and the Philippines; and (d) graduated fees for hospital delivery of children, increasing with each child

a woman bears^{1/}. These are only a few examples of many diverse laws enacted to help control fertility. The principal problem with these laws is that at present they may not reach the people with higher fertility (usually the poor). This derives from the fact that these people at risk of high fertility (usually the poor) are still outside the realm of marriage (i.e. as in Latin America), do not deliver in hospitals, and/or given their low income are not subject to taxation.

The third type of measures may in the long run be more effective and produce benefits beyond those of reducing fertility. This type of measures is encompassed within the framework of socio-economic development. As a large number of research studies have shown that there is a significant correlation between fertility and socio-economic factors, as measured by, inter alia, levels of education, health care, urbanization and employment of women governments are beginning to make an effort to improve the conditions of the poor in the hope that improvement will bring about fertility decline. This effort, no doubt, will bring an increase in the demand for family planning services, while at the same time help to improve the living conditions of the poor.

The fourth type of measures is based on the assumption that pressure of some kind will bring changed behavior among the population. Group pressure has been utilized in the Republic of Korea with Mother's Clubs, in Indonesia with village community participation and folkloric representations that shame

^{1/} More detailed discussion of this and more examples can be found in Annex 1 that presents case studies for seven countries and Annex 2 which presents a summary Table for each of the thirty-five countries with family planning policies including demographic objectives.

people with many children, and in the People's Republic of China, where the number and timing for a couple's children are practically determined by the community. Although a step away from pure voluntarism, community pressure is not usually considered bad in itself on the basis that a large number of human actions are, after all, discharged because it is so determined by the groups people belong to. Pressure, however, may lead to coercion. In India, for example, it was alleged that men were being forced to have vasectomies. Also in India, legislation was written but not signed by the President, stating that men with more than three children who did not get a vasectomy could not hold government jobs. Nonetheless, coercion is believed to have contributed to the fall of the Government of Mrs. Gandhi.

As noted earlier, these types of measures have moved fertility control from the sole purview of the Ministries of Health and the realm of family planning into a more multisectoral concern and into the realm of population planning. The above measures are relatively recent and have not been enacted on a sufficiently widespread basis to have had a meaningful role in the recent decline in fertility. Even if they had some influence, it has not been evaluated. The types of measures adopted, however, offer a glimpse of what governments may be ready to do in the future if ordinary efforts to reduce fertility do not meet with success.

Summary

This section has reviewed the development of family planning efforts in the developing world. It showed the movement of family planning from the private sector, through the government organizations providing family planning services within or outside the Ministry of Health, to today's widely accepted view that family planning is an integral part of maternal and child health services, and therefore the integration of family planning into these services.

The section has also viewed improvements in the delivery of services beginning with the pure clinical approach providing only information and prescription of a few rudimentary contraceptives to the complex systems in use today with clinical, outreach and inundation approaches, providing motivation, information, prescription and follow-up activities and utilizing a wide variety of very effective contraceptives such as the pill and sterilization, and with a freer environment for abortion.

The changes in governments' attitudes toward the problem and the consequent measures those governments are willing to take to achieve their objectives, have also been illustrated. The day of absolute voluntarism has disappeared from countries that take the problem seriously and has been replaced with step-by-step multisectoral measures which approach coercion in some countries. In the meantime, the term "family planning policy" has been replaced by the more encompassing term "population policy" but this has had only slight practical effect in changing the scope of family planning programs. The obvious question in light of the above changes is whether family planning has produced any results in terms of fertility decline or whether the efforts have been wasted. This is therefore the subject of the following section.

IV. FAMILY PLANNING PROGRAMS AND FERTILITY DECLINE

Government family planning programs have been subjected to more evaluation efforts than any other social program. Evaluation efforts, however, have not provided satisfactory answers to the basic question, namely, what is the contribution of programs to the decline of fertility now evident in many countries. Within the framework of evaluation, the main issue stems from those who attribute the reductions in fertility to family planning programs as opposed to those who attribute the same reductions to changes in the number of variables usually referred to collectively as socio-economic development. There are several reasons why solutions to this problem have not yet been found. These reasons, as well as a possible solution to the puzzle, are discussed in this section.

The Problems of Evaluation

The importance of evaluation of family planning programs originated with defenders of these programs who wanted to demonstrate to skeptical governments how effective such programs could be. This was part of the original belief that there was a very large demand for family planning services just waiting for services to be supplied on a mass scale. This belief, as noted before, originated in the relative large demand found by private groups and was confirmed by the high incidence of abortion or by answers given by women to knowledge, attitude and practice (KAP) surveys. The expected rapid acceptance of services and consequent fertility decline did not materialize, however, and whatever effects the programs had on

fertility were difficult to measure and attributions to the programs due to several problems.

The first problem encountered in the evaluation was the unavailability of reliable data. In most developing countries, as shown through demographic data collected by the United Nations^{1/}, data on vital statistics were not available or were so unreliable that observed changes could not be accepted with confidence. By the 1960s many countries had not even taken a population census making estimates of population often impossible. Data problems made it impossible to measure directly changes in fertility. Awareness of the problem and of the need for better data brought several efforts to improve demographic statistics. The census program of the United Nations, programs to improve vital registration systems in several countries, the popularization of sample surveys and the development of techniques of estimation based on incomplete data are examples of these efforts. The results of these efforts, however, did not materialize for several years. Estimates of birth rates have improved greatly in many developing countries, but this is a small step in the gathering of data needed for precise analysis. Age-specific fertility rates, a more useful measure of fertility, are still difficult to obtain for many countries, and when they are available, they are usually outdated. The lack of data to estimate changes in fertility gave rise to the use of family planning program service statistics to evaluate the programs. The efforts to achieve targets, however, produced, in some countries, falsification of data, raising questions about the reliability of these data also.

^{1/} See the various United Nations Demographic Yearbook for an idea about the problems with demographic data.

A second problem in evaluation, even when data are available and fertility changes can be measured, is that of identifying the reasons for these changes. Changes in the birth rate can be caused by changes in the age and sex structure of the population, changes in the marriage rate, lactation practices, the prevalence of sterility, intrauterine mortality, the frequency of intercourse, and by changes in the practice of contraception and induced abortion. Very few studies have been done to explain the influence of each of these factors upon changes in fertility. Some efforts have identified for a few countries the effects of changing age and sex distribution and of marriage rates on changes in the birth rate, but not much more ^{1/}. The evaluations of family planning programs have estimated numbers of births averted as a consequence of contraceptive practice, but these efforts, as noted earlier, may have been vitiated by defective data and assumptions and are, therefore, not fully convincing.

The above problems have been complicated, oddly enough, by the research efforts covered under the umbrella of "determinants of fertility" ^{2/}. These research efforts have concentrated on finding the correlation between indicators of socio-economic development and indicators of fertility levels and changes. Unfortunately, this research has not considered the intermediate variables that are affected by socio-economic factors, and in turn affect fertility. Not much importance has been given, for example, to the relationship between

^{1/} See Mauldin, W. Parker and Bernard Berelson. "Conditions of Fertility Decline in Developing Countries". in Studies in Family Planning, vol. 9 No. 5. May 1978, The Population Council, New York, p. 98.

^{2/} Ibidem. This work contains a good list of studies on the determinants of fertility.

those socio-economic variables and the age of marriage or the proportions married. Not much attention has been given to finding out how those socio-economic variables affect intrauterine mortality and how at the same time they may affect fertility. In other words the research on the determinants of fertility has concentrated on socio-economic variables, while avoiding the study of intermediate determinants and not going much beyond establishing that there are consistent correlations between socio-economic indexes and fertility indexes.

With few exceptions, research into the determinants of fertility has not included consideration of the availability of family planning services. This is surprising considering that much research has been undertaken by economists who, in studying the market for other goods and services, would likely look into both supply and demand functions. The approach utilized in the case of fertility could be defended on the basis that the contribution of socio-economic factors is made not just through contraception and abortion but also through other variables. On the other hand, it appears evident that large reductions in fertility necessitate the practice of either contraception or abortion.

The most important problem is therefore that of attribution of fertility reductions to different causes. On one extreme, the defenders of family planning programs are quick to attribute any slight decline in fertility to programmatic efforts. On the other side, the determinants-of-fertility group tries to explain changes in fertility by changes in education, in health, in status of women, in urbanization, etc. Probably, both groups are at least partially right. All that has to be done is to find out what part of the decline in fertility is due to the practice of contraception or induced abortion. It can then be explained that socio-economic conditions determine the demand for contraception and induced abortion and that family planning

programs determine the supply of those services. Equality between supply and demand simultaneously determines the market and both supply and demand are equally responsible for the amount of contraceptive practice. The question of whether it is socio-economic development or program efforts that determine the level of contraceptive practice is simply not answerable.

Two points related to this problem need clarification. The first one is that socio-economic factors may affect fertility without affecting the demand for contraception. This can be done through effects on the age of marriage and the proportions married, through effects on lactation practices, the prevalence of sterility, and through effects on intrauterine mortality and the frequency of intercourse. It is not clear, however, how these variables work. If socio-economic development brings about an increase in the age of marriage or a decrease in the proportions married, this effect may be compensated by an increase in intercourse outside marriage. Socio-economic development appears to bring about decreases in intrauterine mortality which would tend to increase fertility through increasing the survival of children from conception to birth and tend to decrease fertility when the occurrence of one birth delayed the time of a new pregnancy. The decrease in lactation and in sterility brought about by socio-economic development will tend to increase fertility. The effects of socio-economic variables on the frequency of intercourse are not clear, but if there are any, they would tend to reduce fertility by a small amount. This analysis would imply that the effects of socio-economic development on fertility through variables other than contraception and abortion are minimal.

The second point to be clarified is that family planning programs

in recent years have included efforts geared not only to providing services, but also to increase the demand. Therefore, motivational programs are of primary importance in most of today's family planning programs. The governments of countries providing family planning services are also making, as part of their programs, efforts to alter the socio-economic environment, in the hope that this will influence the demand for family planning.

The problems mentioned can be summarized in problems of availability and reliability of data, problems of definition, problems of methodology and problems of interpretation. The first problem is in the process of solution; more and more assistance is being provided for the collection of reliable data, and although a lot more help is required, the goal is within reach. The second problem - definition - needs some more research of the multidisciplinary type to determine clearly how the direct determinants of fertility do in fact affect fertility. The third problem is complementary to the second; more research is needed, but methodology has to be revised to be able to identify the intermediate variables and the ways in which the remote variables influence intermediate variables and these in turn affect fertility. Different forms of data may be necessary and in turn may require inputs from disciplines other than economics. The fourth problem fortunately does not exist; economists solved it a long time ago. What is needed is less enmity between the different groups working on population, and more understanding of the fact that the contribution of one group without the contribution of the other will not produce the desired results.

Having clarified the problem of attribution, there remains a need to review the evidence that shows that there has been an important reduction in

fertility and that this reduction has been particularly significant in countries with high marks for both socio-economic development and program efforts; less significant for countries failing one of those tests; and that there is no difference for countries failing both tests.

The Decline in Fertility in Developing Countries

The developing world, taken as a whole, experienced a consistent increase in the rate of growth of population up to the late 1960s; there was a stabilization at around 2.4 per cent per year during the next quinquennium and, in the mid 1970s, the rate of growth dropped by about one-tenth of a percentage point to 2.3 per cent. This decline does not appear dramatic at first sight. The change of trend, however, is of tremendous importance in the history of population. For the first time in modern times the rate of growth is declining rather than increasing.

The continuous increase in the rate of growth had taken place because of a continuous decline in mortality without a corresponding decline in fertility. Fertility in developing countries remained constant or even increased somewhat up to about 1960. Since then, fertility has been slightly decreasing up to the present. Mortality during the 1960s declined faster than fertility and consequently contributed to the increase in the growth rate even when fertility also declined. During the 1970s, however, because of the acceleration in fertility decline and the slowing down in mortality decline, the rate of growth has finally begun to decline. For our purposes, therefore, the turning point came in the 1960s when fertility in the developing world began to decline.

Table 5 summarizes data on per capita income, reductions in crude birthrates, government position on family planning, social setting, and

TABLE 3
DEMOGRAPHIC AND FAMILY PLANNING INDICATORS FOR 63 SELECTED COUNTRIES ^{1/}

	GNP Per Capita (U.S. Dollars) 1977	Percent Decline (-) in Crude Birth Rate 1960-1977	Government Position on Family Planning ^{2/}		Social Setting Classification ^{3/}	Proportion of Married Women of Reproductive Age Using Contraception (Age 15-44)		Number of Points that 1977 Birth Rate is Under 50
			Position	Year		1970	1977	
<u>Low Income Countries</u>								
Cambodia	-	-6.1	-	-	C	-	-	4
Bangladesh	90	-6.1	A	1971	C	-	9	4
Ethiopia	110	-3.9	-	-	C	-	-	1
Haiti	110	-2.0	D	1972	C	-	-	1
Honduras	110	-2.2	A	1966	C	1	17 ^{b/}	5
Upper Volta	130	-2.0	-	-	C	-	-	2
Zaire	130	-4.2	D	1973	D	-	-	4
Burma	140	-9.3	-	-	D	-	-	11
Nicaragua	140	-1.9	-	-	C	-	-	-2
India	150	-18.6 ^a	A	1952	D	12	24	15
Nicaragua	150	0.0	-	-	C	-	-	4
Niger	160	0.0	-	-	C	-	-	2
Vietnam	160	-11.0 ^a	A	1977	D	-	-	10
Afghanistan	190	0.0	D	1970	C	-	1 ^{b/}	2
Dominican	190	-8.2	A	1960	D	4	6 ^{b/}	4
Tanzania	190	+2.1	D	1970	C	-	-	2
Sierra Leone	200	-27.0 ^a	A	1965	A	0	44	24
Guinea	220	-4.2	-	-	C	-	-	4
Malawi	230	-4.4	D	1971	C	-	30 ^{b/}	7
Madagascar	240	-4.3	-	-	D	-	-	5
Guatemala	270	0.0	A	1966	D	2	40 ^{b/}	-1
Uganda	270	0.0	D	1972	C	-	-	5
Sudan	290	0.0	D	1970	C	-	-	4
Angola	300	-4.0	-	-	C	-	-	2
Indonesia	300	-21.3 ^a	A	1960	D	-	10	10
<u>Middle Income Countries</u>								
Egypt	320	-18.2 ^a	A	1965	D	0	21 ^{b/}	14
Cuba	340	0.0	-	-	D	-	-	7
Ghana	340	-2.0	A	1969	D	1	2	2
Nigeria	420	-3.0	D	1970	C	-	-	0
Thailand	420	-30.4 ^a	A	1970	D	-	32	10
Senegal	430	+2.1	A	1974	C	-	-	1
Yemen Arab Republic	430	-2.0	-	-	C	-	-	1
Philippines	450	-22.2 ^a	A	1970	A	0	22	14
Zambia	450	-2.0	D	1974	D	-	-	0
Guatemala	500	+2.1	D	1960	D	-	5	2
Morocco	550	-10.0 ^a	A	1960	D	1	5	5
Bolivia	630	-0.3	-	-	D	-	-	0
Ivory Coast	690	0.0	-	-	C	-	-	0
Colombia	720	-34.8 ^a	A	1970	A	-	40 ^{b/}	20
Denmark	790	-12.8 ^a	D	1960	A	-	4 ^{b/}	0

TABLE 5 (Cont'd).

	GDP Per Capita (U.S. Dollars) 1977	Percent Decline (-) in Crude Birth Rate 1960-1977	Government Position ^{2/} on Family Planning		Social Setting Classification ^{3/}	Proportion of Married Women of Reproductive Age Using Contraception (Age 15-44)		Number of Points that 1977 Birth Rate is Under 50
			Position	Year		1970	1977	
<u>Middle Income Countries</u> (Cont'd)								
Guatemala	790	-14.6*	A	1975	B	-	3 ^{b/}	9
Korea, Republic of	820	-48.8*	A	1961	A	32	44	29
Dominican Republic	840	-26.0*	A	1968	A	-	30 ^{a/}	13
Peru	840	-17.0*	B	1976	A	-	1 ^{a/}	11
Tunisia	860	-31.9*	A	1964	B	8	18	18
Syrian Arab Republic	910	-2.1	-	-	A	-	-	4
Malaysia	930	-25.6*	A	1966	A	7	34 ^{a/}	21
Algeria	1110	-5.9	B	1971	B	-	-	2
Turkey	1110	-30.2*	A	1965	A	3	-	20
Mexico	1120	-15.6*	A	1974	A	-	21 ^{a/}	12
Chile	1160	-40.5	B	1966	A	-	-	28
China, Republic of	1170	-47.5*	A	1968	A	31	61	29
South Africa	1340	0.0	B	1966	B	-	-	11
Brazil	1360	-10.0*	B	1974	A	-	-	14
Iraq	1550	-2.0	B	1972	A	-	-	2
Argentina	1730	-12.5*	-	-	A	-	-	29
Iran	2160	-14.9*	A	1967	B	3	23	10
Hong Kong	2590	-45.7*	A	1973	A	50	64	31
Venezuela	2660	-21.7*	B	1968	A	-	-	14
<u>Capital Surplus Oil Exporters</u>								
Saudi Arabia	6040	-3.9	C	-	B	-	-	1
<u>Centrally Planned Economies</u>								
China, People's Republic	390	-38.9*	A	1962	B	-	-	28
Korea, Democratic Republic of	670	-19.5*	-	-	A	-	-	17
Cuba	910	-40.6*	B	1960	A	-	-	31

Sources: World Bank data.

Mortman, Dorothy, L. and Ellen Hofstatter. Population and Family Planning Programs. Ninth Edition. The Population Council, New York, 1978.

Mauldin, W. Parker and Bernard Berelson "Conditions of Fertility Decline in Developing Countries, 1965-75" in Studies in Family Planning, Vol. 9 No. 5 (May 1978). The Population Council, New York.

^{1/} All countries in each category have a population of 5 million or more in 1977. Categories include: low and middle income countries except European countries; capital surplus oil exporters; and centrally planned economies with a per capita income less than \$1000 except European Countries.

^{2/} From Mortman and Hofstatter, in which A means official program to reduce the population growth rate; and B means official support of family planning activities for other than demographic reasons.

^{3/} Adapted from Mauldin and Berelson so that there will be approximately twenty countries in each classification as follows: C-low; B-medium; A-high.

^{a/} 1976

^{b/} 1975

* Countries with a reduction in birthrate of 10 per cent or more.

proportion of married women of reproductive age using contraception for sixty-three countries. The countries in Table 5 are generally classified as the developing countries, and the countries listed are limited to those with a population of five million or more. Footnote 1 of Table 5 identifies all criteria applied for selecting the sixty-three countries included in the table. It is of interest to note that the countries listed in Table 5 have among themselves approximately 95 percent of the population of the developing world or about 67 percent of the total world population.

Table 5 contains a great deal of information, some of which has been put in a somewhat more compact form in Table 6. Table 6 shows that there are family planning policies in forty-five of sixty-three countries. In twenty-six of these a specific objective of the policy is fertility decline. In another nineteen countries, fertility reduction is not a specific objective of the policy. Eighteen of the sixty-three countries have no policy at all.

Table 6 shows that there is an association between the presence (having a policy or not) and content (having a demographic objective or not) of a family planning policy and the degree of reduction in the birthrate. Of the forty-five countries with a policy, twenty-six had a large (10 percent or more) reduction in birthrate. Among countries with a policy, large reductions in birthrate (10 percent or more) were more common among countries whose policy had a specific objective to reduce fertility (twenty of twenty-six) than countries with a policy which did not spell out a specific objective to reduce fertility (six of nineteen). It seems that having a specific demographic objective written into the policy is related to large reductions (10 percent or more) in the birthrate, while the absence of a specific objective to reduce fertility impeded the reduction of the birthrate. It might be noted that of those six countries with a policy including a specific objective to reduce fertility but which achieved only small reductions in the birthrate we find:

TABLE 6

RELATIONSHIP BETWEEN LEVEL OF REDUCTION IN BIRTHRATE
AND TYPE OF FAMILY PLANNING POLICY FOR 63 COUNTRIES
FOR THE PERIOD 1960-1977

	No. Countries With Birthrate Reduction $\geq 10\%$	No. Countries With Birthrate Reduction $< 10\%$ ^{1/}	Total
No. Countries With Policy Having Demographic Objective	20	6	26
No. Countries With Policy But No Demographic Objective	<u>6</u>	<u>13</u>	<u>19</u>
Total No. With Policy	26	19	45
No. Countries Without Policy	<u><u>1</u></u>	<u><u>17</u></u>	<u><u>18</u></u>
Total	27	36	63

^{1/} Includes all countries with a birthrate reduction of less than 10%, countries with no change in birthrate, as well as those countries with an increase in their birthrate. Of all 63 countries 51 had some decline in the birthrate leaving 12 countries with no change (9) or an increase (3) in their birthrate. Of these 12 countries, 8 were countries with a policy and 4 countries had no policy. See text for explanation.

Senegal only recently adopted a policy; Nepal, Kenya and Ghana have had a policy since the mid-1960s but have made little progress in developing a program; and Pakistan and Bangladesh programs have not achieved any significant success. In comparison, there were six countries which had large reductions (10 percent or more) in the birthrate, but which were countries with a policy not including a specific objective to reduce fertility (Ecuador, Peru, Chile, Brazil, Venezuela, and Cuba). It is of interest to note that each of these six countries is Latin American, is in the middle income range and is predominately Catholic.

By contrast, of the eighteen countries with no family planning policy, only one had a large reduction in fertility (10 percent or more). This country, the Democratic Republic of Korea, still has no official family planning policy.

Table 5 also shows that large reductions in the birthrate (10 percent or more) are also associated to the level of income of the country. Among the twenty countries with per capita incomes of \$250 or less, three out of six countries having policies with demographic objectives achieved a large reduction in the birth rate. For the same level of income no country of five with policies but no demographic objectives reached the same level of success. In countries with per capita incomes between \$250 and \$1,000, eleven out of fifteen countries with demographic objectives succeeded, and three out of eight with policies but not demographic objectives achieved a large reduction in the birth rate. Among countries with higher incomes the record is still better; five out of five countries with demographic objectives and one out of six with policies but no demographic objectives obtained a large reduction in the birth rate. In only one country without a policy, the Democratic Republic of Korea with a per capita income of \$670, was a large reduction in the birthrate achieved.

That the decline in fertility is related to the practice of contraception is also shown in Table 5. A rule of thumb is that, if one assumes that a birth rate of about 50 implies natural fertility in the absence of contraception, then for each two percent of women of child-bearing age practicing effective contraception the birth rate will decrease by one point. This rule, of course, assumes that the women practicing are a random sample of all women of child-bearing age in marital unions. This is not always the case and therefore the required percentages will vary from country to country. As can be seen in Table 5, however, the number of points that the birth rate was under 50 in 1977 is related to the percentage of married women of reproductive age practicing contraception, although not clearly in the expected relation of one to two.

The above simple analysis has indicated that large reductions in the birth rate in the developing world have taken place mainly in countries that have adopted policies with the specific objective of reducing fertility and have implemented those policies, and that the amount of the reduction in fertility is explained by the prevalence of contraceptive practice. This explains the role of the supply of contraceptive and abortion services in fertility decline.

It is also clear that the adoption of policies and the success in those policies, once they are implemented, are related to the level of per capita income in the countries and consequently to the level of modernization and development. Although it is not established that countries adopt policies and implement them in answer to an increased demand for services, it may be hypothesized that, as development advances, people become aware of the possibilities for self-improvement and of the possibilities of limiting their family

size and begin demanding services at first from the private sector and later on from public health services. In view of this demand, political leaders make the decision to provide family planning services through government channels. From this point of view, the policy decision may in itself be a reflection of the demand for services.

The above exercise was done only for countries showing a large reduction in the birth rate simply so as not to claim reductions where they may be dubious. The data in the table are, however, complete as available for the sixty countries and the conclusions could be carried forward if one is to consider small declines as valid. For the purpose of this paper, however, this is not necessary. That there is a relation between the practice of contraception and fertility is not in doubt.

V CONCLUSIONS

This paper has reviewed the process of adoption of family planning policies, the development of family planning programs, and the contribution of programs to fertility decline. We need, however, to consider the conclusions of the review and its implications for the future.

The first conclusion is the importance of data collection and research. It is clear that countries do not adopt family planning policies and programs unless they are aware of the rapid rate of growth of population in their countries and the consequences of that growth for socio-economic development. In this type of research it is important to keep in mind the cultural, social and economic background of the country in question and a clear idea of the general development objectives of the government, particularly in regard to the desired future standards of living, and the alternative routes that can be followed to achieve those objectives.

Research has played and will continue playing a role in terms of the improvement of regular programs. From past experience, it appears clear that the market for family planning is not just one market for a particular product or service. It is rather a conglomerate of markets for different products and different services. A couple may want to practice family planning, but unless the services are appealing to them, the services will not be used. Research, therefore, will need to determine both what makes people desire to limit their fertility and how they want the services to be provided. In regards to the first, a number of studies have investigated the determinants

of fertility and have provided general ideas about macro-economic factors that appear related to fertility levels and variations in those levels. Little has been done to study the mental processes that intervene in the decision-making process. A multidisciplinary approach to the solution of this problem appears to be needed. Moreover, it is likely that direct questioning of people in this respect will produce better results rather than the indirect approach of guessing fertility decisions from people's characteristics.

The answer to the questions "what services do people want" and "how do they want them" is also important. Up to now the approach has been essentially trial and error. Again, having people choose between possible alternatives before implementing them may be an efficient way to find out what services people want, at least in a general way before those services are tried. Even after the services are being provided on a trial basis, it may be advantageous to find out why some people utilize those services while other people do not, and to try to find out ways to improve those services. Experimentation is certainly very important, but should be done only after having determined whether the general approach is acceptable to the population or not.

Finally, research has an important role to play in evaluation, but it must begin by recognizing that, practice of family planning is a supply and demand concern where the two simultaneously determine the market and the absence of one of them just means no practice. What is more important for research is to find out how socio-economic factors affect the decision to have a reduced fertility and to make that research policy-oriented rather than purely theoretical. It is no use knowing that twenty more years of education for everybody will result in lower fertility when a country cannot afford the cost of providing that level of education and cannot wait that long for the

desired effects. More important is to learn how education and other variables affect decision-making, to study possible alternatives of producing the same effects and then provide realistic policy recommendations. Research in population and family planning has had an important role to play in the past and may have an even more important role in the future.

The second important conclusion is that programs to be effective will have to cover as many markets as possible. The first family planning programs to be implemented did not show positive results until an effort had been made to increase the number of government agencies involved in the program, to utilize all in the provision of a comprehensive activities service, to utilize a number of different approaches and to utilize a wide variety of contraceptive methods. As explained before, the market for family planning appears to be a composite of several markets with several goods or services exchanged. There is no question that motivational efforts are necessary for a large majority of potential users. Many people will not practice family planning even if they are strongly motivated unless the groups to which they belong approve of such practice. Community pressure, therefore, will undoubtedly be helpful. Many potential acceptors are happy with the pure clinical approach to family planning; others will require that approach only if accompanied by health services; others, still, will only accept and practice if services are brought to their place of residence or work-- the outreach approach. Many more, however, may prefer the convenience of the inundation approach if they can obtain their contraceptives at a reasonable cost in as private a way as possible. These approaches focus on the need for providing services appealing to as many markets as possible. The final objective of every family planning

program should be eventually to fade away and for people to practice contraception through the commercial system - basically, inundation. It may however take many years before this stage is reached. In the meantime a multi-approach, with multi-agency involvement is required for old, as well as new, family planning programs.

The question of methods is also important. In the past, programs emphasized only a few methods, either because no other alternatives were available or because of program preferences. Expansion in the number of methods, however, appears to have contributed to success. The main problem with contraception is still that people have to decide "not to have children." The road for the future is to discover a safe contraceptive that turns around the decision-making process that primarily makes the person "decide to have children." This demands essentially a long-term vaccine. The present injectable goes some way in this direction, but it is still short-term and its safety is not well established. Furthermore it is not reversible. The IUD has lost importance now because of the need for medical backup which frequently is not readily available in developing countries. Sterilization is still considered a final method because in practice it is not reversible; until the ideal contraceptive has been developed, however, it is necessary to make available to the population, without unnecessary restrictions, the full range of contraceptives now known plus abortion.

A third conclusion focuses on the role of private groups. The principal role of private groups in the past has been to provide a limited amount of services before official policies were adopted and programs implemented. It is evident that in any country, regardless of the stage of

development, there is a demand for family planning services. This market has not been completely served by the private sector even when no official services are available. The future should, however, be different.

There are a large number of countries without official policies or programs; there are a few countries with policies but no programs; and even a few countries with policies and programs that do not work. The private groups can play an extremely important role in all of these countries, not just to provide services but also to support the research needed to convince governments of the importance of the population problem. To do this, private groups will need to discard the concept of "limited efforts" and expand wherever necessary; they should begin focusing on fertility effects rather than on pure service provision. Finally, they will need to become more research oriented; the more proficient in research these groups become, the more confidence people will have in their results and more impact on governments will be obtained. For this, private groups will need a great deal of help from internal and external groups. The work will not be easy, but the results may determine whether governments "grow" in the direction of population programs or remain as simple observers while the problem grows in magnitude. A fourth conclusion is in respect to countries with programs. It is not disputed by anybody that countries which are better off in terms of per capita income and in general socio-economic conditions have been more ready to implement family planning programs. It is also clear that these countries have been more successful with their programs. Among the group of countries with per capita incomes of \$1,000 or more, Brazil, Mexico, Iraq and Iran are the

only countries with populations of five million or more where family planning policies including demographic objectives have not been adopted, or if adopted --as in Iran--have not produced good results. Iran and Iraq, although having high per capita incomes, do not have the level of socio-economic development of other countries in the same income group. They are also Muslim countries. These two characteristics may explain why not much has happened with fertility control in them. Mexico has the socio-economic conditions and a relatively new policy and progress and results are likely to be positive soon. Brazil is perhaps the exception of a middle income country where the lack of a policy may have contributed to maintaining the high birth rate. In this case the demand appears to be present, given the utilization of private services and the decline observed in the birth rate up to the present. Provision of services on a wider scale could have reduced the birth rate even more than up to now.

On the other extreme, is the story of the low income countries where, even with socio-economic conditions not conducive to high practice of contraception, the presence of a strong supply effort with motivational campaigns such as in India and Indonesia, and some community pressure as in Indonesia, has brought a large increase in practice and significant reductions in the birth rate. Sri Lanka, although at this level of income, is higher in socio-economic development than other countries in the same group and therefore both factors of supply and demand have been conducive to fertility decline.

An important lesson to be learned from the countries discussed above: no matter how backward the country, some results can be obtained by establishing strong programs, and regardless of how advanced the country is in socio-economic terms, if it has a high birth rate, the decline in that rate will be very slow unless a supply system is established. This is something that countries

presently without programs, should consider with care.

Finally, governments adopting policies and implementing programs in the past appear to have been too optimistic with regard to the presence of demand and therefore promised achievements which later on could not be reached. Furthermore, the rapid expansion of services nationwide has made those services appear to be inefficient. For both old and new programs, it would be advisable to determine first and realistically the extent of the demand; second, to extend services on a priority basis only where the estimated demand warrants the services; and, third to set up targets that are achievable and will not discourage the workers or providers of either technical or financial aid. This does not mean that no emphasis should be put on family planning, it only means that provision of services should be made on a rational basis.

In the 1950s and early 1960s, family planning appeared to be the only solution to the population problem--and a rapid one. Expectations today are more realistic. Policy-makers and program managers realize now that setting up a working program requires several years and that achieving substantial results takes a few more years. On this basis, the need for exaggerating likely results no longer exists. The will to have a program working is certainly more important than the promises made.

ANNEX I
CASE STUDIES

ANNEX I

CASE STUDY: PEOPLE'S REPUBLIC OF CHINA

Policy Initiation and Evolution

Factors underlying the declaration of an official family planning policy are obscure. However, impetus for the adoption of an official policy may have been mediated by the facts enumerated below:

- . 1949 In this year there was a feeling among the new leaders of China that the country had too many people^{74*} Probably for economic reasons as well as political considerations, the leaders contemplated and planned for an enumeration of the population.
- . 1953 A national census was initiated.
- . 1971 Chairman Mao advocated "Planned Birth", but he undoubtedly influenced the development of family planning at an earlier date⁴¹

The results of the 1953 census were apparently a major factor in illustrating the need for family planning, and probably were influential in helping to launch an official family planning policy in 1956. The policy cited the promotion of later marriages and birth limitation as vehicles for achieving the socio-economically based goals of the population policy^{41,74}.

Major setbacks to the fulfillment of the policy occurred. At the outset of the Great Leap Forward in the early 60's and during the Cultural Revolution of the mid and late 60's, the implementation of family planning policy was halted⁷⁴. As time has passed since the end of the Cultural Revolution, the family planning policy and program has been revived and has been fostered by policy decisions which:

*Reference numbers are assigned here using the same order that these appeared in the preparation of Annex II.

- encouraged contraceptive use, child spacing, and delayed marriage;
- . made use of inducements which mediate against large families;
- . encourage population migrations to underpopulated areas.

All three of the above are collectively known as "planned birth"²⁸.

Development of Government Family Planning Program Activity

. Administration

Family planning activity seems to have always been administered through a complex and intricate network of political and medical systems. This system was described around 1970-1971 by independent authors^{41,42}. There are distinctly rural and urban components to family planning activity and each corresponds to the political framework of the rural and urban societies⁴¹. The administrative units of the city (highest to lowest) are the districts, wards, and lanes or neighborhoods⁴¹. In the rural setting, family planning responsibility rests with the leaders of the commune, production brigades and teams^{41,42}. Oversight is provided at all times by the Communist Party to "revolutionary committees". The Communist Party establishes policy, while the "revolutionary committees" execute programs at each level in the society (e.g. national, urban, rural, local, etc) by providing administrative and some executive function back-up support⁴¹.

Within the context of the administrative organization, local registration systems work well and facilitate the program on the local level. However, at the national level, the vital statistics registration system has not worked efficiently and has made the administration of the family planning program difficult.

. Delivery of Services

The development of the delivery of family planning services occurred,

apparently, during two periods of time in particular. With the declaration of a family planning policy in 1956, a program was set in motion which employed multiple approaches using multiple types of personnel. Family planning activities were delivered in a variety of settings. Between 1971 and 1975, Mao's concept of "planned birth" (particularly local target setting through community participation) came to fruition. Nonetheless, since 1956 family planning activities have operated through clinical, outreach and inundation approaches simultaneously in the context of the political structure of the commune or production team.

All health workers (lay, paramedical, and medical; part-time and full-time) may initiate and continue all family planning activities to a varying extent. Health aides and midwives prescribe orals and other conventional contraceptives (e.g. foams, jellies, etc.). Barefoot doctors are trained in some cases to insert IUD's.

All forms of contraception are available; however, the IUD was favored during the 60's while the oral contraceptive is currently the most widely used form of contraception²³. Oral contraceptives are available free of charge. Other contraceptives can be purchased for a nominal charge. Abortions and sterilizations are encouraged²³.

Information and motivation activities are promoted primarily by word of mouth, although radio messages are a common format for promoting family planning.

In summary, a multi-faceted approach to family planning has existed since program inception in 1956. With the exception of program suspension during the Great Leap Forward and the Cultural Revolution, the only change in the multiple approach came in the early 1970's with a refinement of activity promoted by Chairman Mao and known as the "planned birth" movement.

Inducements 42,43,45,74

Incentives

1. Since the early 50's some communes and production brigades (and teams) have given compensation to those who defer having children, or limit the number of children they might have.
2. Use of public funds for subsidy (preferential treatment usually in the form of housing, public service employment or educational opportunity) for those who limit family size.

Laws

1. Legal restraints on the age of marriage.
2. Removal of ban on contraceptive practice in 1953.
3. Regulations which can be used to delay the process of registering and receiving a marriage certificate.
4. Regulations which prohibit college students from marriage.
5. Emancipation laws for women. These are directed as to allow females to help support their parents without disgrace.

Other

Community participation and pressure facilitate the family planning program. The key to the "success" of family planning acceptance in the People's Republic of China has been massive indoctrination that teaches small families are best. This indoctrination is in fact carried out by the masses by word of mouth and by peer pressure. Once a policy has been set, the masses, through a finely

developed network of party committees, work to enjoin the support of the community. Communities are encouraged to exchange "experiences" using not officials, but common folk to expound on their use of certain methods. Emulation then follows⁴³. Once birth rates are set centrally, the reproductive couples of the commune or production brigade establish who will have children and when and how many²⁰. But all along the way, people play a crucial role in determining how a policy will be carried out⁷⁴.

Results

China was estimated to have about 850 to 950 million people in 1976^{2,96}. The crude birthrate has declined about 16 percent between 1960 and 1975. User data are not generally available for the People's Republic of China. Some sample surveys have been done. The proportion of married women of reproductive age (MWRA) protected by contraception varies widely in those sampled areas: in 1975 from a reported low of 40 percent in Honan Province to a high of 80 percent in four production brigades²⁸. Shanghai reports a rate of 80 percent in 1975²⁸.

ANNEX I

CASE STUDY: COLOMBIA

Policy Initiation and Evolution

In many respects the development of private and public family planning activity in Colombia exemplifies its development in several Central American countries. Rapid urbanization of Colombia has been a rallying point of population activity. Urbanization trends were documented by researchers studying the 1938 and 1951 censuses²⁷. Individuals in the 1960's voiced concern that population growth and the accompanying urbanization were a prelude to difficulties in social and economic development²⁷. However, mediating against widespread acceptance of family planning WAS the voice of the Roman Catholic Church.

Several circumstances came together in the 1960's which brought the issue of family planning to public attention:

- . 1960's (early) Induced abortion was recognized by the medical profession as a serious problem not only in and of itself, but the injuries as a result thereof were also viewed as a social problem. Concern for this medical and social problem was focused by the Colombian Association of Medical Schools (ASCOFAME). ASCOFAME initiated a campaign to educate professionals to the situation and attempted to publicize the implications of the problem.
- . 1965 The Colombian Association for Family Welfare (PROFAMILIA) was founded as a family planning association.
- . 1960's (late) As ASCOFAME and PROFAMILIA stepped up their service activity including their campaigns to educate professionals, the Church headed a coalition organized to halt or at least

slow down the spread of family planning activity in Colombia.

- . 1969 The Government of Colombia (GOC) initiated a maternal and child health (MCH) section within the Ministry of Health (MOH) which provided family planning services.
- . 1970 Still under intense opposition from the Church, the GOC adopted a carefully worded population policy statement in the 1970-1973 Colombian Development Plan^{3,27}. The document advocates lower fertility, but maintains a low profile (the words "family planning" are deleted from the usual title "MCH/family planning services") while providing for vigorous support of family planning^{3,15,27,28}.

Development of Government Family Planning Program Activity

. Administration²⁷

Family planning services are provided in Colombia through: the MOH as a part of the integrated health service; PROFAMILIA; ASCOFAME and by several smaller, organized groups. This has presented difficulty in developing a coordinated, consistent, and coherent organization for providing family planning services, although this arrangement does not appear to have adversely affected the country's ability to provide services.

The MOH effort in family planning is an administrative part of and integrated with the MCH services. The administrative organization of these services corresponds to the organization of the MOH. A central office sets the rules by which the policy is to be executed and operational units (hospitals, health centers and posts) execute the program.

PROFAMILIA is organized around a clinic system, community distribution programs (distribution posts) and special distribution programs (coffee estates). These programs are centrally planned and directed.

ASCOFAME is organized as a professional organization and is concerned, primarily, with aiding the administration of educational programs through established teaching institutions.

. Delivery of Services

Colombia is probably the only developing country where both the clinical approach and the inundation approach were started simultaneously and before the government became involved in family planning. In 1965 both of these approaches were initiated through a clinic system (staffed by a physician, nurse, an auxiliary nurse, a motivator and a secretary) and a network of distribution posts. Despite the distribution of pills and condoms by lay workers through the inundation approach, the IUD was and is the most popular form of contraception.

In 1969 the MOH initiated family planning services integrated with MCH services, but the clinical approach continues to be emphasized. Physicians and paramedical personnel are found in the largest health facilities (hospitals) and the smallest (health posts). Yet, the latter of these also have an "outreach" worker. Paramedical workers provide all services to some extent. Lay outreach fieldworkers are used to provide information, motivation, and referral services only.

PROFAMILIA services are supported by information and motivation activities back-up: mobile "motivators" and audio-visual programs. PROFAMILIA and other family planning organizations run dozens of other large scale, regional information/motivation campaigns and other service programs of a diverse nature^{20, 27, 28}.

. Inducements

Incentives These are not used

Laws Legislation to equalize women's rights in Colombia
has repeatedly failed to pass

Results

The mid-year 1977 population of Colombia was 24.6 million⁹⁶. Colombia has experienced a 34.8 percent decrease in its crude birthrate between 1960 and 1977⁹⁶. In 1967 there were 35,600 new acceptors of family planning services accepting some form of contraception¹². In 1975 there were 177,299 acceptors of contraceptive methods²⁷. 1977 is the first year for which there are user data estimates available. These estimates indicate that there were 1,508,000 contraceptive users in Colombia in 1977 representing 48.6 percent of the married women of reproductive age. Public and private efforts result in roughly half of all users being serviced by one sector or the other².

ANNEX I

CASE STUDY: GHANA

Policy Initiation and Evolution

Although family planning services were practically non-existent in Ghana prior to 1964, the development of family planning activity has been marked by a lack of fanfare and hostility found in many countries at the initiation of family planning activity. Family planning activity and the commodities involved in family planning services were not specifically banned at any time in Ghana. Indeed any physician, public or private, could provide family planning services if he so desired. Government public health officers in charge of maternal and child health (MCH) services were free to emphasize family planning services to the extent that these were his priority¹⁴. Several events preceded the adoption of an official family planning policy by the Government of Ghana (GOG):

- . 1964 The Christian Council of Ghana set up two "medical advice centers" supported by the Pathfinder Fund, patient fees and the sale of contraceptive and informational materials¹⁴.
- . 1960's (mid and late) Medical advice centers were staffed by GOG doctors who gave services free of charge; private doctors charging small fees¹⁴.
- . 1966 By this date the GOG made contraceptives available to all women confined to the major Christiana Government hospital in Accra.
- . 1960's (late) International Planned Parenthood Federation (IPPF) began to sponsor the Christian Council of Ghana.
- . 1967 Formation of the Ghana Planned Parenthood Association (GPPA)⁶.
- . 1967-1969 During this period the GPPA focused its efforts at its two projects: a family planning clinic integrated into a project at Accra University and the provision of family planning

services through two clinics based in general practitioners' offices. The GPPA was able to involve the GOG in these projects.

In 1969 the GOG declared a family planning policy and in 1970 the GOG launched its own program. The policy is based on a socio-economic rationale and has remained unchanged since 1969.

Development of Government Family Planning Program Activity

. Administration⁸

Since the inception of the family planning program, it has been coordinated by the Ghana National Family Planning Program (GNFPP), a body comprised of the Ministry of Health (MOH), the GPPA, and the Christian Council. The program is administered by the GNFPP through the facilities of all of these organizations. Services are offered in a categorical* fashion, although attempts have been made to integrate family planning services in GOG facilities.

. Delivery of Services

Up until and through the first year of the GOG program, family planning services were provided through a clinical approach. Information and motivation were provided by volunteers while other services were provided solely by physicians at a fixed or mobile facility. Since 1971 family planning workers have been the main personnel to provide family planning services. These workers do provide all services to some extent including prescription and followup. Prescription by paramedical workers includes insertions (which lost popularity after 1969) and distribution of oral contraceptives (which became the most widely used contraceptive in Ghana after 1969).

The outreach approach began in 1971 with lay workers providing infor-

*Categorical is defined here as meaning that family planning services are offered as a special program administered by the Ministry of Health - much in the same way that malaria eradication programs are categorized and referred to as "vertical programs".

mation and motivation services in home visiting programs (primarily the GPPA).

Although the inundation approach has probably been operating in Ghana since at least 1969, chiefly through the 600 retail outlets of the Ghana National Trading Company, 1975 was the year of commitment to inundation as demonstrated by the GOG's invitation to other outside (non-government) wholesalers to be distributors of contraceptives in Ghana.

Information and motivation activities have been nurtured through a massive advertising campaign, family life programs in 20 school systems, and youth organization programs.

. Inducements¹⁶

Incentives These are not used in Ghana.

Laws Several laws were passed in the early 70's to prod government workers to set an example for the country in limiting the number of children per family. These included:

1. Limitation of paid maternity leaves to applicants who have served not less than one year.
2. Limitation of the number of paid maternity leaves to three during the entire working life of those affected.
3. Limitation of child allowances paid to government officers to three. This applies equally to all officers irrespective of whether they reside in or outside of Ghana.
4. The Government of Ghana's responsibility for payment of travelling expenses of officer's children was limited to three.

Results

The population of Ghana in mid-1977 was 10.6 million. During the period 1960 to 1977 Ghana's high crude birthrate has declined by only a modest 2 percent⁹⁶. In 1970 in Ghana there were 13,900 new acceptors of all types of contraceptive methods; and there were about 25,000 users of contraceptive methods in 1970 which represents about 1-2 percent of the married women of reproductive age^{12,98}. This is in contrast to 1976 when there were 33,600 users representing about 2 percent of the married women of reproductive age⁹⁹. In 1976 family planning clinics claimed to be servicing 28,850 of these users¹.

ANNEX I

CASE STUDY: INDIA

Policy Initiation and Evolution

India more than any other country in the world has been the leader, both intellectually and logistically, in developing, exploring and promoting family planning practice. Family planning has been a topic of intellectual ferment in India since the 1920's starting with economists' study of the relationships among economic growth, social growth, and population growth⁴⁴. Since that time and through the efforts of both the private and public sectors, India has pioneered or promoted most of the strategies used at one time or another by all of the developing nations which have official policies and programs of family planning.

Several factors made difficult the effort to encourage family planning among Indians. Although economists in general urged family planning practice, many of the economists who correctly established the relationships between economic growth, social growth, and population growth believed that industrialization would solve India's developing population problem. India's vast social and physical diversity presented many organizational difficulties for the private sector in their attempts to persuade the Government of India (GOI) to take an official and affirmative stand on family planning policy and program. Many of the clinics and groups which formed during the 30's and 40's offered family planning services, but found few clients at their doors. Perhaps this situation was as much a result of low socio-economic levels as it was a result of a lack of motivation and information, but also technological developments in the form of safe, reliable, and reversible contraceptive methods were not yet available.

Private efforts specifically aimed to make the leaders of India cognizant of the consequences of excessive population growth apparently came to fruition in 1940 when Nehru who had been appointed to prepare a national plan for development mentioned in this document the need for a national family planning policy⁴⁴. Several key events occurred during the next 12 years, however, before either an official policy or program developed. These included:

- . 1943 Health Survey and Development Committee appointed. In its report issued in 1946, it stated that decreasing mortality rates were accruing through disease control efforts and would exacerbate the population growth rate. It advised a family limitation policy.
- . 1947 During this and the following year (just after Independence), shortages -particularly of food - developed. A Planning Commission was appointed to study utilization of resources. A review of health programs was made with the recommendation to start development of a family planning policy.
- . 1951 The GOI allocated funds to enable gathering of the information needed to develop a population policy and program.

In 1952 a population policy was approved and evolved further in several steps:

- . 1952 Declaration of a policy.
- . 1950's Initial funding for getting a program underway was approved in 1952, but because no other countries had official family planning program experience from which India could draw, the family planning program in the 50's in India was characterized primarily by research, strategy development and initiation of some services in conjunction with existing maternal and child

health services (MCH)⁴⁶.

- . 1956 During the mid-1950's a policy decision was made that acknowledged that the GOI perceived family planning efforts to be in need of more autonomy than the MOH had allowed until this time. Thus, the Family Planning Board was created in 1956, but as a part of the MOH.
- . 1960's and 1970's During these two decades there has been no deviation from full commitment to the concept of family planning by the GOI^{28, 44, 45, 46}. Policy decisions have dealt with program approach and organization and delivery systems rather than with commitment to family planning. However, the family planning effort did have to weather program slow-downs as a result of severe drought in 1965-1966, war with Pakistan in 1965, a dramatic oil price increase and its consequences in 1973, and the after-effects of alleged use of coercive tactics during the early and mid 70's to meet contraceptive acceptor targets -- particularly sterilization acceptors.

Development of Government Family Planning Program Activity

. Administration

India has had a number of complicated administrative changes over the past three decades. The family planning program was under the jurisdiction of the Ministry of Health and Family Planning (MOH)⁴⁵ until 1977 when it became the Ministry of Health and Family Welfare. Initially in the early 50's, because of the existing MOH facilities, an attempt was made to integrate family planning with MCH services. The program was centrally sponsored, but executed by the states. States did bear a portion of the recurring costs of the program. In the latter part of the 50's and through the mid 60's, efforts were made to give the program more autonomy but within the MOH.

This was effected through the Family Planning Board established in 1956. With this change, the program took on more of a categorical flavor throughout the 60's. In 1966 the central government assumed the full cost of the program; the program tended to be more centralized and categorical. This situation lingered until about 1973 at which time the national development plan redirected the family planning program into an integrated health care system³. The family planning program today is still entirely centrally funded, but executed by the states in GOI health facilities (including GOI mobile units). The current organization of the program includes a Central Family Welfare Council and the Department of Family Welfare. The former defines policy and the latter executes the program in consultation with the state governments⁴⁴. The national structure is replicated in each state⁴⁴. The national marketing scheme of the Nirodh (condom) is organized by the Department of Family Welfare as part of its activities in executing the program.

. Delivery of Services

Matching the categorical nature of the program in the early years through the 1960's, the family planning program was characterized by exhaustive manipulation and experimentation with the clinical approach. Because sterilization has been the predominant measure promoted in family planning and because there is more of a feeling that this measure can be undertaken most appropriately by a physician, the clinical approach has predominated. Thus the program has been chained to facilities, both fixed or mobile (mobile clinics were introduced in the early 60's) employing teams of physicians (i.e. vasectomy camps). Apart from sterilization the traditional methods of contraception were promoted.

The outreach approach to family planning has existed on paper practically

since the inception of the program. Fieldworkers had been trained in the delivery of family planning services since the late 50's and probably continue to be the most appropriate personnel for delivery of family planning through the outreach approach. However, this has never been a strong program approach in India apart from its use in association with gaining sterilization acceptors. Added emphasis to this approach might occur with popularization of the multipurpose worker (early 1970's).

Most recently and since the early 70's, the inundation approach has gained momentum in India. The commercial vending of the Nirodh (condom) is the best example of this approach.

Currently there is a great emphasis on the clinical approach in an integrated basic health service using the multipurpose worker.

Information and motivation activities have become more diverse and more frequently used during the 1970's. With the advent of the inundation approach, mass communication campaigns, including the experimental use of satellite communication, now discontinued, have been used.

Two major frustrations have occurred among many difficulties with the evolution of the program and service delivery. These are particularly important for other programs⁴⁵:

1. Because of the sheer size of the task in India, there has been a tendency to spend several months or years to start up projects. During lengthy start-up periods, little service activity occurs. In some cases, frustration or a lack of results has probably contributed to a premature decision to switch to a new approach before the old approach had enough time to take hold.
2. Family planning services in some cases have achieved targets by sterilizing or otherwise protecting against the risk of conception females who are near the end of their reproductive age. The bene-

fits that accrue from these persons toward averting births might be small for the expended effort.

. Inducements

- Incentives⁴⁴
1. Cash payments for sterilization (to acceptor and provider)
 2. Payment in kind to the acceptor of sterilization (e. g. clothing)
 3. Although still only in the experimental stage, payments to acceptors of sterilization have been made in the form of savings accounts or bonds with transfer or maturation deferred until acceptance in the case of sterilization or after the end of the child-bearing years of the couple.
- Laws^{8, 28, 44}
1. Raising the minimum legal age of marriage from 15 to 18 for females and 18 to 21 for males.
 2. GOI reserves 8% of its assistance to State Plans for those states whose family planning performance has been satisfactory by certain criteria and Laws.
 3. 1976 - Under the Emergency, revocation of worker benefits, family allowances, ration cards if quotas were not met. Additionally, workers could lose their job for not fulfilling quotas. If communities did not meet quotas, similar loss of benefits could result to the entire community.
 4. Laws providing for tax deductions for contributions to family planning organizations or activities were enacted recently.

Results

The estimated mid-year population of India was 631.7 million⁹⁶ in 1977. The crude birthrate declined 18.6 percent⁹⁶ during the period 1960-1977. The number of acceptors in India through the national program in 1966 and 1976 were respectively 1.8 million and 12.5 million^{2,98}. There were 25.3 million users through government services in 1977. This represents 24 percent of the married women of reproductive age (MWRA) for 1977².

Kerala had 1,044,000 users (31 percent of its MWRA), Punjab had 691,000 (30 percent of its MWRA), and Bihar had 1,580,000 users (about 14 percent of its MWRA) in 1977².

ANNEX I

CASE STUDY: INDONESIA

Policy Initiation and Evolution

While private efforts were able to nurture family planning activity as early as 1952 in Indonesia, this was accomplished in the wake of years of accumulated momentum eschewing the concept of birth control including:

- . Religious and moral codes which were perceived by the indigenous population to frown upon the use of measures to control family size⁴⁸.
- . Legislation of the 30's and 40's which restricted the use of birth control devices⁴⁸.
- . The perception that population growth would eventually decline with economic development. Until this perception could be realized, it was the official policy of the Government of Indonesia (GOI) to resettle Indonesians from foci of crowded areas to outlying islands. This policy was called transmigration^{15,48}.

Indonesia recognized that it had a population problem as demonstrated by its policy of transmigration, but the GOI chose to deal with overpopulation in a way which it perceived would maintain the status quo until socio-economic development could alleviate the problem.

Although the period between the early 1950's and the mid 1960's provided little room for service expansion, the formation of the Institute of Family Welfare in 1952 began consolidation of other widely dispersed and loosely organized groups resulting in the Indonesian Planned Parenthood Association (IPPA) in 1957^{15,52,78}. IPPA became a vehicle for persuading the GOI to accept family planning activity as a right of the parents as well as on the basis of family planning being a means of practical health promotion. President Sukarno, during this period, did allow the practice of

child spacing for mothers whose health might be endangered without its practice^{48,52}.

After the change in government in 1966, led by the new President (Suharto), movement towards a population policy came quickly. Suharto's Government gave tacit approval of family planning without approving family planning outright. During 1967 several Government ministers and President Suharto himself referred to the potential threat of population growth in terms of socio-economic development⁵². Suharto signed the U.N. Declaration on Population in 1967. The official policy of Indonesia was presented in 1968, at the same time that a National Family Planning Institute was established. In the following year, 1969, the policy and program were unveiled in the First Five-Year Development Plan (FY1970-1974).

Development of Government Family Planning Program Activity

. Administration

The National Family Planning Institute (NFPI) was created in 1968 to coordinate private efforts, including those of expatriate groups working in Indonesia, and to develop a national family planning system. In 1970 the semi-autonomous NFPI which had been part of the Ministry of People's Welfare was transformed into the National Family Planning Coordinating Board (NFPCEB) responsible to the Minister of People's Welfare^{4,15,48}. The IPPA turned over all its service facilities to the GOI and assumed an important role in administering training programs, research and evaluation, and motivation campaigns; it continued to provide prescription and follow-up along with other family planning services in remote areas of Indonesia^{15,48}. The GOI first established its program in Java and Bali and ten other provinces in 1974⁴⁹. In 1978, the constitution of the NFPCEB was changed

and the chairman became responsible directly to the President.

The basic assignment of the NFPCB is to formulate general policy for and to coordinate the implementation of the national family planning program and complementary population programs at national and regional levels, and also to coordinate the implementation of these programs in the field^{52,53}. The NFPCB has a Chairman, a Vice Chairman and four Deputy Chairmen responsible for general affairs, family planning, population, and supervision and control. There is an NFPCB office in each province, headed by a Provincial Chairman appointed by the NFPCB responsible for coordination of activities. He is responsible to the Governor, who has the overall responsibility for population and family planning activities in the province. The Health Inspectors in the provinces along with the provincial NFPCB actually execute the program, since most family planning activity takes place in Health Ministry personnel.

. Delivery of Services

Initially the NFPCB provided services using a clinical approach. All services were under the jurisdiction of the physician and available in private and Health Ministry facilities as well as Armed Forces facilities. Services were available as in a categorical program: not linked to any other services. Services were available for a few hours a week⁴⁸.

Although the clinical approach continues to be a major approach of the Indonesian Family Planning Program, the outreach and inundation approaches are also in use in Indonesia. The outreach approach which began about 1970 was initiated through a program whereby Health Ministry personnel would provide family planning services using a village head and his wife as a focal point for popularizing contraceptive practice⁴⁸. During the early 1970's nurse midwives and fieldworkers were beginning to realize their potential as providers of information, motivation, prescription (of pills, diaphragms,

condoms, IUD's, jellies and foams), and follow-up. As a result, greater use of these workers for these tasks was encouraged. By 1974 shopkeepers and Ayurvedic medical supply distributors had become the cutting edge of the inundation approach⁵⁰. The use of jamu, the Indonesian system of herbal medicine distribution, for contraceptive supply distribution has been one of the more interesting aspects of any of the approaches.

Information and motivation activities have developed simultaneously with the innovations that accompanied the provision of other family planning services. Information and motivation at the outset of the program were relegated to the clinic setting. The move out of the clinic came early in the program when mobile information and motivation teams were established⁴⁸. During the early 1970's use of acceptors as motivators was begun. As other services began to be provided through outreach programs, so too were information and motivation popularized through in-home meetings (several families per meeting). Although some mass communication is used, many of these campaigns along with special drives have been phased out because of the bad reputation they seemed to create through promotion of mis-interpreted information or through promotion abuses⁴⁸. In 1975 information and motivation activities made as their primary target the to-be-wed couple. In 1976 population education was brought into the schools.

During the period 1973 to 1978 the first efforts to integrate family planning services into the basic health services were attempted⁷. Serious commitment to this approach beyond the experimental stage began within the last year or two with the help of substantial foreign aid earmarked for this purpose.

. Inducements

Incentives These are not used in national program.

Laws During the 1970's laws pertaining to the following areas were enacted:

1. Tax dis-incentives for large families
2. Repeal of import duties on contraceptives.

Results

The 1977 mid-year population of Indonesia was 133.5 million⁹⁶.
Indonesia's crude birthrate declined 21.3 percent between 1960 and 1977⁹⁶.
The number of acceptors of any contraceptive method were 21,200 in 1968
(National program only)⁹⁸. In 1976 there were 2,213,000 acceptors through
government supported services². In 1970 there were estimated to be 54,000
users of contraceptive methods through the national program representing
less than .2 percent of the married women of reproductive age⁹⁸. In Fiscal Year (FY)
1977 there were 3,701,000 users through government supported services representing
18 percent of the married women of reproductive age in Indonesia². In FY 1978
Indonesia reported 4,687,723 users representing 24.6 percent of the married women
of reproductive age. In the first half of FY 1979, Indonesia reported 4,496,715
users representing 24.1 percent of the married women of reproductive age.

ANNEX I

CASE STUDY: REPUBLIC OF KOREA

Policy Initiation and Evolution

Until 1960 although conditions seemed to favor recognition by the Government of Korea (GOK) of the benefits to be derived from a population policy which included family planning, no policy was adopted. War conditions during the period 1950 to 1953 may have been an early stimulant to the cause of family planning as war brought greater burdens to the larger families^{21,57}. Yet, legislation which hindered the cause of family planning was retained²¹.

With the change in government in 1960, an abrupt change in attitude toward population policy followed and a sophisticated policy evolved rapidly. Chronologically events proceeded as follows:

- . 1960 GOK allowed public expression of views toward family planning⁵⁷.
- . 1961 Individuals from diverse professional backgrounds initiated the Planned Parenthood Federation of Korea (PPFK), which was formally designated as the International Planned Parenthood Federation (IPPF) affiliate in the same year^{1,57}.
- . 1961 A series of meetings between PPFK, IPPF and the GOK resulted in the GOK adopting a population policy in 1961 for issuance in the first five year plan (1962-1966)^{3,57}.
- . 1967 While the first five year plan adopted a population policy based on a demographic rationale, the second five year plan iterated the relationship between economic growth and population growth.
- . 1972 Population policy was supported on socio-economic grounds

and was accompanied by a great deal of statistical justification.

- . 1974 Since 1974 the GOK has used incentives and has undertaken with greater effort the task to integrate maternal and child health services (MCH) with family planning services²⁸.
- . 1976 Formation of Population Policy Coordination Committee to coordinate all government activity with regard to population.

Development of Government Family Planning Program Activity

. Administration^{15,57}

The GOK has been concerned primarily with prescription and follow-up activities. The PPFK, subsidized by the GOK, has assumed the responsibility for administering all other family planning activities. The GOK program is executed through the family Planning sub-section of the MCH services. MCH is one of five bureaus in the Ministry of Health and Social Affairs (MOHSA). Day-to-day management is coordinated by the chief of the family planning sub-section and the MCH bureau chief. The Bureau director is apprised of major management decisions. Although these persons are responsible for all aspects of policy and operation, they are advised by a committee of 15 members: the Family Planning Advisory Committee to the Minister. The MOHSA works through nine provincial governments and two special city governments all of which have family planning sub-sections in their Bureaus of Public Health and Social Affairs. Targets are handed down to these regional offices and eventually to field workers as quotas.

. Delivery of Services

Early in the program there was a strong predilection to permit only physicians to prescribe contraceptives. In conjunction with an extensive network of health ministry facilities, a large number of private physicians, and the popularity of the IUD during this period (the IUD has always been

the most widely used contraceptive method in Korea), these factors encouraged early entrenchment of the clinical approach²¹. Paramedical workers, however, were given legal sanction to provide all family planning services to a limited extent soon after the outset of the program. Nonetheless the paramedical workers' most important activities were provision of information and taking part in motivation activities, not in prescription activities.

By the mid 60's a new worker was added to the family planning program: the fieldworker^{2,57}. This worker participated in all program activities to some extent, including contraceptive prescription, although he could only refer IUD and sterilization acceptors. As the mid 60's passed these workers popularized the outreach approach with their door-to-door and group meetings. The mother's club was an important thrust of the family planning program and utilized the fieldworker.

Since the early 70's the inundation approach has been used in connection with all activities. Even street corner information and motivation campaigns were initiated recently⁷³.

At all times throughout the program, authorized private physicians have been reimbursed by the GOK on a per acceptor basis⁵⁷.

Information and motivation have been promoted heavily using printed promotional aides because of the high literacy rate among Koreans. However, during the early years of the program other mass communication formats were used.

Although the PPFK has been involved primarily with information, motivation and training, it has recently launched what amounts to an inundation program as part of the GOK's New Village Movement, a rural development scheme⁸.

Inducements

Incentives

Cash payments to acceptors have been used in association with vasectomy acceptance (mid 60's).

Laws

1. 1961 Lifting of the ban on the manufacture and distribution of contraceptives.
2. Mid 70's New legislation which ties tax exemptions to the number of dependents: no more than three children are eligible for this exemption.
3. Mid 70's Changes in government rules to allow advertising of hormonal products.
4. Mid 70's Repeal of a law which prohibited importation of contraceptives.

Results

The 1977 mid-year population of the Republic of Korea was 36.0 million⁹⁶. Between 1960 and 1977 Korea has experienced a 48.8 percent decline in its crude birthrate⁹⁶. Users of all methods of contraceptives from all sources rose from 1,322,000 in 1970 (i.e. representing 32 percent of married women of reproductive age: MWRA) to 2,094,000 in 1977 (i.e. representing 43.9 percent of MWRA)^{2,98}. Public and private effort contributed roughly equally to the number of users of contraceptive methods in all time periods after the onset of a national family planning program².

ANNEX I

CASE STUDY: PAKISTAN

Policy Initiation and Evolution

The first family planning activity to occur in Pakistan began soon after Pakistan separated from Britain as a colonialist territory and assumed dominion status in 1947. Family planning activity grew out of aid to refugees from India provided by interested business leaders and wives of government officials through the Pakistan Women's Voluntary Service and the All Pakistan Women's Association spearheaded by the Prime Minister's wife. Both of these groups which had organized family planning services in major cities in 1952, merged to form the Family Planning Association of Pakistan (FPAP) in 1953 which became the International Planned Parenthood Federation (IPPF) affiliate⁸².

Government involvement in family planning activity came early in Pakistan and progressed in parallel with some of the following events⁸²:

- . 1955 The Government of Pakistan (GOP) allotted money for support of voluntary agencies' activities.
- . 1958 In an effort to secure from the GOP a commitment to provide services directly, a series of meetings was held. The outcome was a decision by the GOP to continue support of family planning, but that services should continue to be provided by the FPAP in FPAP facilities. In addition, services were initiated in armed forces facilities and at railroad hospitals.
- . 1959 In a major speech the Prime Minister addressed problems of over-population.
- . 1959 Population Council of New York mission to Pakistan; policy recommendations outlined.

- . 1960 De facto official policy established in the second five year plan as budget for family planning was allocated and program infrastructure established.
- . 1965 Official policy issued as part of the third five year plan; based on demographic arguments but acknowledging socio-economic rationale.
- . 1970-1971 Civil war; partitioning of Pakistan; Bangladesh declares independence.
- . 1973 Reorganization of family planning program ordered; socio-economic rationale made the firm underlying rationale of the policy.
- . 1977 Near cessation of family planning activities in the country.

Development of Government Family Planning Program Activity

- . Administration^{28,31,82,91,97}

The administrative structure of the GOP family planning program has undergone a series of complex changes over the years. Sources are at variance with one another about these changes. At the outset of the program, the provision of services was implemented through the facilities of the Ministry of Health (MOH) and administered by a National Family Planning Directorate (Board) (NFPB) within the health ministry. However, the program was carried out as an integrated one but subsequently became a categorical one. Provincial Family Planning Boards were established (at least on paper) during the 60's to approve projects and to allocate funds. Through the 60's the Federal and Provincial Pakistani Governments provided roughly equal funding of the program. Apart from the NFPB and also responsible for family planning was the Central Family Planning Council (CFPC).

The CFPC too was losely a part of the MOH. This council was composed of the Minister of Health and central and provincial secretaries of health and finance. In 1968 the status of the CFPC was changed to that of a full division within the MOH, and the MOH was renamed the Ministry of Health, Labor, and Family Planning (MOHLFP). Under the 1973 reorganization, an unusual arrangement was made whereby the overall administrative responsibility of the family planning program remained with the Population Planning Division in the MOHLFP; however, the execution of the program was placed with the Population Planning Council, an autonomous government body of representatives of various ministries and special interest groups. The federal Minister of the Population Planning Division was, however, the chairman of the Population Planning Council to ensure continuity at least at the upper levels of the program between the MOHLFP and the Population Planning Council. In 1975 the program was made completely autonomous. In each province there was a Provincial Population Planning Board to administer the program to which funds were directly transferred for project allocation. In high density areas, a "continuous motivation system" was established in the early 1970's but was abandoned in the mid-70's.

. Delivery of Services

There has always been a fixed-base clinical approach employed in the family planning program in Pakistan, but the outreach approach has been used since the inception of the program in 1960 and was the main approach between 1965 and 1977 for the provision of services. Village level workers and the traditional midwife were used as early as 1960 as a referral agent¹⁵. The concept of trained workers called Lady Family Planning Visitors and Lady Health Visitors was accepted and employed in the

early 60's. These workers are still used. Included in the concept of using these paramedical workers was allowing non-physicians to insert IUD's (orals were not used in Pakistan until the 70's). These paramedical workers were a necessity since IUD insertion in Pakistan can be performed only by a woman and there are few female physicians in the country.

Subsequent to the separation of Bangladesh from Pakistan and during the reorganization of the family planning program starting in 1973, there was a re-emphasis and expansion of the outreach approach. The vehicle for widening the outreach approach was the "continuous motivation system" (CMS). This approach called for an army of lay workers to provide family planning services. Although the CMS has been abandoned (1976), the workers are still paid but are not working. The CMS is described in detail elsewhere by Taidi¹⁵. In sum the CMS was to have been an intensification of the outreach approach in high density areas utilizing non-physician workers⁸.

Inundation in the commercial sense got off the ground in 1975¹⁵. Allegedly, some 35,000 shops (pharmacies, tea stalls, general goods stores, etc.) were enlisted to sell pills and condoms. Simultaneously in 1975, a new program was started which trained high school graduates to insert IUD's^{28,50}. These workers, Lady Welfare Visitors, participated in motivation, information, prescription, and follow-up activities and were to be associated with the CMS.

Prior to 1971 information and motivation activities were carried out by fieldworkers as an outreach approach, although mass communication was employed⁹. Little information is available about the current information and motivation campaigns in Pakistan are virtually non-existent.

. Inducements

Incentives

1965 Cash incentives were paid to IUD and

vasectomy acceptors starting in 1965⁸².

Laws

1. Need for prescription for oral contraceptives lifted in 1974.

Other

1. Dai fieldworkers during the early 60's were paid a retainer fee of Rs 15 per month and a referral fee of Rs 2.50 for each client who had an IUD insertion. Distributors of other contraceptives received an amount equal to 80 percent of the retail price of these⁸².
2. In 1975 when inundation got off the ground, shopkeepers were allowed to keep 40 percent of the retail price¹⁵.
3. Workers starting in 1965 who did IUD insertions got paid a premium on a per IUD insertion basis. This practice stopped in 1972⁹².

Results

The 1977 mid-year population of Pakistan was 74.9 million⁹⁶. The high crude birthrate has declined by a modest 8.2 percent during the period 1960 to 1977⁹⁶. In 1966 there were 512,000 acceptors (IUD and Sterilization only) of contraceptive methods through the national program (377,000) from West Pakistan⁹⁸. In 1975 there were 2,086,000 acceptors of government supported family planning services (contraceptive acceptors - all methods). Family planning associations number their share of these acceptors in 1975 at about 28,000. User figures are not available for Pakistan for past years except that public and private effort were estimated in 1975 to have 780,000 users². At best this would represent about 6.0 percent of the married women of reproductive age.

ANNEX II
COUNTRY SUMMARY SHEETS

Annex II contains individual country summary sheets for 35 countries which have a family planning policy. All information contained within the tables in the body of the text of this document were drawn from the information tabulated in this annex. Sources cited in these tables correspond to the references listed at the end of the paper.

Each summary sheet relates pertinent information about each of six categories important to governments' role in family planning. These include:

- . Development - When the government became active in family planning, year of policy and program adoption.
- . Organization - How is the program organized: is it guided by the ministry of health or by some autonomous body; is the system of delivery predominantly categorical or are family planning services integrated with the health services; what facilities are used to deliver services - ministry of health facilities or special, non-government facilities or both.
- . Approaches - Which approaches were introduced at what time.
- . Contraceptives - Which contraceptives were most important at what time.
- . Personnel and Activities - Date at which certain categories of workers were brought into the family planning effort. This category also attempts to summarize the family planning activities participated in by these different kinds of workers at the time they were brought into the family planning effort. Additionally, in the case of all workers except physicians, where these workers were allowed to prescribe and supply contraceptives and the type of contraceptive prescribed is listed.

It is important for the reader to note that in preparing

these summary sheets it was rare for sources used to specify the exact year or even time period in which workers began to participate in family planning activities in general, but most specifically in information and motivation activities. Thus, it should be assumed that all paramedical and lay workers participate in both of these activities even, though these are not always recorded on the summary sheets.

- . Inducements - When direct payments were begun as part of the program to acceptors of family planning (incentives), and what laws have been enacted which have facilitated the family planning program. Where coercion has been a part of the program, this is noted.

Legend for Annex II by Category

Development

- X Non-Government Sector Activity
- G Government Activity (financial and/or facilities)
- P Official Policy
- S Official Program Activity
- * Indicates policy and service program before independence of Bangladesh
- ** Indicates policy and service program after independence of Bangladesh
- /// Period of no family planning activity

Organization

Governing body of policy and program:

- A Autonomous institute, board, or council etc. is responsible for family planning and program implementation; this body is accountable directly to the head of government and is not part of the ministry of health.
- MOH The ministry of health or a division thereof is responsible for family planning policy and program.

Program Class:

- K Categorical
- + Integrated

Facilities:

- (S,MOH) Family planning services are provided through special facilities (S) such as any non-government clinic (family planning organization - FPA -), and through facilities of the ministry of health (MOH).

- U Information unavailable

Approaches

- C Clinical Approach
- CM Mobile Clinics
- O Outreach Approach
- I Inundation Approach

- a/ Where any letter appears twice for a country, this indicates re-instatement of the approach after a period of diminished emphasis of that approach in the government program.

Contraceptives

- O Pill
- T Traditional

Contraceptives (cont'd)

IUD	Intrauterine device
C	Condom
INJ	Injectable
Ab	Abortion
S	Sterilization
-	Indicates that no other single contraceptive method constitutes more than 10 percent of total contraceptive use

Personnel[@]

U	Information unavailable
---	-------------------------

Activities[@]

I	Information
M	Motivation
P	Prescription (Types of contraceptives provided by specified worker are listed in parentheses)
F	Follow-up
U	Information unavailable

Inducements

I	Incentives paid directly to the acceptor
L	Laws facilitating the practice of family planning
C	Coersion

[@]Categories of workers include: physicians, paramedicals, lay workers and commercial vendors. Sub-headings under each category, as these appear in the tables, are not an exhaustive list of worker types in that country. Lay workers' salaries, where salaries are received (most lay workers are volunteers), constitute only a nominal portion of the workers' total income.

Paramedical workers may be facility based and/or fieldworkers. Generally the name of the worker gives some indication (i.e. LHV is a lady health visitor - a fieldworker). Paramedical workers generally have relatively lengthy formal training; lay workers have only nominal training for limited duties.

It should be assumed that all paramedical and lay workers participate in both information and motivation activities even though these are not always recorded on the summary sheets. See discussion of this in opening paragraphs of this annex.

In the "activities" category the "X" in the body of the table indicates the date or time period during which the specified worker was first used in the family planning program.

SUMMARY SHEET: INDIA

	Pre-	1950's			1960's			1970's		
	1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
<u>Development</u>										
Activity, Policy, and Program by Year of Action	X	X(1950) G(1951) PS(1952)								
<u>Organization</u>										
Governing Body Program Class; (Facilities)		MOH +(U)			MOH K(S.MOH)			MOH +(S,MOH)		
<u>Approaches</u>										
		C			CM			O	I	
<u>Contraceptives</u>										
Most Accepted Method		T	T	S	S	IUD	S	S	S	
2nd Most Accepted Method		-	-	T	T	S	IUD	IUD	IUD	
<u>Personnel and Activities</u>										
Physician: I,P,F Paramedical: P,F; (O,C,IUD)		X								
<u>Inducements</u>										
				I,L					C	

Sources: 1,2,3,5,7,8,9,28,44,45,46,98

SUMMARY SHEET: PEOPLE'S REPUBLIC OF CHINA

Pre-1950	1950	1960	1970
Early Mid Late	Early Mid Late	Early Mid Late	Early Mid Late

Development

Activity, Policy, and Program by Year of Action

Organization

Governing Body

Program Class; (Facilities)

Approaches

C, O

Concepts/Views

Most Accepted Method
2nd Most Accepted Method

Personnel and Activities

Key: I, R, P, F
Personnel: I, M, P, F
Key: I, M, R, P, F

X
X
X

Industries

L

Sources: 20, 23, 28, 41, 42, 43, 45, 74

SUMMARY SHEET: SINGAPORE

	Pre-	1950's			1960's			1970's		
	1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
<u>Development</u>										
Activity, Policy, and Program by Year of Action	X	G(1950)		P(1959)		S(1965)				
<u>Organization</u>										
Governing Body						MOH				
Program Class; (Facilities)						+(U)				
<u>Approaches</u>										
						C		O		
<u>Contraceptives</u>										
Most Accepted Method						O	O	O	O	
2nd Most Accepted Method						IUD	Ab	S	Ab	
<u>Personnel and Activities</u>										
Physician: I,P,F						X				
Paramedical: U						X				
Volunteer: U						X				
<u>Inducements</u>										
								L	L	L
Sources:	2,15,21,28,53,59,60,61,63,98									

SUMMARY SHEET: PAKISTAN

	1950's			1960's			1970's				
	Pre-1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late	
<u>Development</u>											
Activity, Policy, and Program by Year of Action	X(1947)	G(1952)			S(1960)*	P(1965)*			P(1970)*		
<u>Organization</u>											
Governing Body					MOM			A			
Program Class; (Facilities)					K(S,MOE)			U(U)			
<u>Approaches</u>											
					C,O			O	I		
<u>Contraceptives</u>											
Most Accepted Method					IUD	IUD	IUD	IUD	O		
2nd Most Accepted Method					S	S	S	S	IUD		
<u>Personnel and Activities</u>											
Physician: I,P,F					X						
Paramedical: I,M,P,F; (O,C,IUD)						X					
LFPV: I,M,P,F; (O,C,IUD)						X					
LNV: I,M,P,F; (O,C,IUD)						X					
LWV: I,M,P,F; (O,C,IUD)										X	
Commercial Vendor: P,F;(O,C)										X	
<u>Inducements</u>											
Sources: 2,8,9,15,28,31,50,82,92,97,100,101											

SUMMARY SHEET: BANGLADESH

	1950's			1960's			1970's			
	Pre-1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
<u>Development</u>										
Activity, Policy, and Program by Year of Action	X(1947)	G(1952)			S*(1960)	P*(1965)			PS(1973)**	
<u>Organization</u>										
Governing Body					MOH				A[policy]; MOH [program]	
Program Class; (Facilities)					K(S,MOH)				+ (S,MOH)	
<u>Approaches</u>										
					C,O					
<u>Contraceptives</u>										
Most Accepted Method					IUD	IUD	IUD	IUD	O	
2nd Most Accepted Method					S	S	S	O	IUD	
<u>Personnel and Activities</u> ⁺										
Physician: I,P,F					X					
Paramedical: I,M,P,F; (O,C,IUD)						X				
LFPV: I,M,P,F; (O,C,IUD)						X				
LHV: I,M,P,F; (O,C,IUD)						X				
Dais:										
<u>Inducements</u>										

Sources: 2,8,9,15,28,32,82,83,84,92,98

⁺ Other Paramedical Personnel: FWW (Family Welfare Worker), FWV (Family Welfare Visitor), FWA (Family Welfare Assistant), and FPA (Family Planning Assistant). FWW and FWV are paramedical workers at Thana and Union levels; FWA is a multipurpose village worker; FPA coordinates family planning activities of FWA and FWV at Union level. FWW is responsible to the health division of the MOH and all others are responsible to the family planning and population control division. Each of these categories of workers are post-independence workers (i.e. post 1971).

SUMMARY SHEET: REPUBLIC OF KOREA

	Pre-	1950's			1960's			1970's		
	1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
<u>Development</u>										
Activity, Policy, and Program by Year of Action										
<u>Organization</u>										
Governing Body										
Program Class; (Facilities)										
<u>Approaches</u>										
<u>Contraceptives</u>										
Most Accepted Method										
2nd Most Accepted Method										
<u>Personnel and Activities</u>										
Physician: I,P,F										
Paramedical: P,F; (O,C,IUD)										
Family Planning Nurse: U										
Fieldworkers: I,M,P,F										
Multipurpose: Family Planning (I,M,P,F), MCH, Tuberculosis Control										
<u>Inducements</u>										

Sources: 1,2,3,8,21,28,57,73,98,100,101

SUMMARY SHEET: EGYPT

Pre- 1950	1950's			1960's			1970's		
	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late

Development

Activity, Policy, and
Program by Year of Action

G(1955) X(1957)

P(1962) S(1965)

Organization

Governing Body
Program Class; (Facilities)

A
K(MOH)

A [policy], MOH [program]
+(MOH)

Approaches

C

I

Contraceptives

Most Accepted Method
2nd Most Accepted Method

O	O	O	IUD	O
IUD	IUD	IUD	O	IUD

- 98 -

Personnel and Activities

Physician: I,P,F
Paramedical: I,P,F; (O,C)
Commercial Vendor: P; (O,C)

X

X
X

Inducements

L

Sources: 2,4,10,11,13

SUMMARY SHEET: FIJI

Pre-	1950's			1960's			1970's		
1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late

Development

Activity, Policy, and
Program by Year of Action

SP(1962)

Organization

Governing Body
Program Class; (Facilities)

U
U(U)

Approaches

C

Contraceptives

Most Accepted Method
2nd Most Accepted Method

Personnel and Activities

Physician: I,P,F
Paramedical:

Inducements

Sources: 9,15

SUMMARY SHEET: IRAN

	Pre-	1950's			1960's			1970's		
	1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
<u>Development</u>										
Activity, Policy, and Program by Year of Action		G(1953)	X(1957)		P(1963)		S(1967)			
<u>Organization</u>										
Governing Body					MOH		MOH			
Program Class; (Facilities)					K(S,MOH)		+(MOH)			
<u>Approaches</u>										
					I		C,O		CM	
<u>Contraceptives</u>										
Most Accepted Method							O	O	O	
2nd Most Accepted Method							IUD	IUD	IUD	
<u>Personnel and Activities</u>										
Physician: I,P,F					X					
Paramedical: I,M,P,F,(O,IUD)					X					
Fieldworkers: M,F, referral (may distribute O)										

Inducements

Sources: 2,9,28,86,87,98,100,101

SUMMARY SHEET: MALAYSIA (PENINSULAR)

Pre- 1950	1950's			1960's			1970's		
	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late

Development

Activity, Policy, and
Program by Year of Action

G(1962) PS(1964)

Organization

Governing Body
Program Class; (Facilities)

A
K(S,MOH)

+(U)

Approaches

C

CM,I,O

Contraceptives

Most Accepted Method
2nd Most Accepted Method

O
IUD

O
S

O
S

O
S

Personnel and Activities

Physician: I,P,F
Paramedical: P,F; (O,C,IUD,S)
Traditional Midwife: P,F

X

X

X

Inducements

L

Sources: 1,2,3,9,21,28,54,55,56,69,98,100,101,107

SUMMARY SHEET: TUNISIA

Pre-	1950's			1960's			1970's		
1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late

Development

Activity, Policy, and
Program by Year of Action

G(1964) X(1968)
P(1965)
S(1966)

Organization

Governing Body
Program Class; (Facilities)

MOH
K(S,MOH) + (actually remains C)

Approaches

C O,I

Contraceptives

Most Accepted Method
2nd Most Accepted Method

IUD IUD IUD IUD IUD O
- 0 0 0 0 IUD

Personnel and Activities

Physician: I,P,F
Paramedical: P,F;(O,C,IUD)
Traditional Midwife: P,F

X
X
X

Inducements

L L L L

Sources: 2,3,22,23,24,98,100

SUMMARY SHEET: BARBADOS

	Pre-	1950's			1960's			1970's		
	1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
<u>Development</u>										
Activity, Policy, and Program by Year of Action		G(1952) X(1955)			P(1965)					
<u>Organization</u>										
Governing Body		A								
Program Class; (Facilities)		K(S,MDH)								
<u>Approaches</u>										
					C					
<u>Contraceptives</u>										
Most Accepted Method					O	O	O	O		
2nd Most Accepted Method					IUD	IUD	IUD	IUD		
<u>Personnel and Activities</u>										
Physician: I,P,F					X					
Paramedical: P,F					X					
Nurse-Midwife					X					
Nurse										
Fieldworker										
<u>Inducement</u>										

Sources: 1,2,3,15,19,26

SUMMARY SHEET: MAURITIUS

	Pre-	1950's			1960's			1970's		
	1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
<u>Development</u>										
Activity, Policy, and Program by Year of Action		X(1950)			G(1964) P(1966)			S(1970)		
<u>Organization</u>										
Governing Body Program Class; (Facilities)					U U(U)					
<u>Approaches</u>										
					C			O		
<u>Contraceptives</u>										
Most Accepted Method					O			O		
2nd Most Accepted Method					-			-		
<u>Personnel and Activities</u>										
Physician: I,P,F					X					
Paramedical: P,F;(O,C,IUD)								X		
Lay: M								X		
<u>Inducements</u>										

Sources: 1,2,3,5,9,15,20,102

SUMMARY SHEET: NEPAL

Pre-	1950's			1960's			1970's		
1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late

Development

Activity, Policy, and Program by Year of Action

X(1958)

GPS (1965)

Organization

Governing Body
Program Class; (Facilities)

A (but as unit of MOH)
K (MOH)

.MOH
+(MOH)

Approaches

C

L, O

O

Contraceptives

Most Accepted Method
2nd Most Accepted Method

IUD
O

O
S

O
S

O
S

Personnel and Activities

Physician: I, P, F
Paramedical: P, F; (O, C, IUD)
Commercial Vendors: P, F; (O, C)

X
X

X

Inducements

L

L

Sources: 1, 2, 3, 15, 89, 90, 96

SUMMARY SHEET: SRI LANKA

	Pre-	1950's			1960's			1970's		
	1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
<u>Development</u>										
Activity, Policy, and Program by Year of Action		X(1953)		G(1958)			PS(1965)			
<u>Organization</u>										
Governing Body							U			
Program Class; (Facilities)							U(U)			
<u>Approaches</u>										
							CM,C,O		I	
<u>Contraceptives</u>										
Most Accepted Method							IUD		O	
2nd Most Accepted Method							S		O	IUD
<u>Personnel and Activities</u>										
Physician: I,P,F							X			
Paramedical: I,P,F; (O,C,IUD)							X			
<u>Inducements</u>										
									L	

Sources: 2,3,15,17,20,28,47,50,68,70,95

SUMMARY SHEET: TURKEY

Pre-	1950's			1960's			1970's		
1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late

Development

Activity, Policy, and
Program by Year of Action

G(1961) P(1965)
K(1963) S(1965)

F(1973)

Organization

Governing Body
Program Class; (Facilities)

MOE
K(MOE)

+(MOE)

Approaches

CM, C

I, O

Contraceptives

Most Accepted Method
2nd Most Accepted Method

IUD

IUD
O

IUD
O

Personnel and Activities

Physician: I, P, F
Paramedical: P, F; (O, C, IUD)
AMN's: I, M, P, F; (O, C, IUD)
Commercial Vendors:

X
X

X
X

Inducements

Sources: 1, 2, 15, 21, 28, 58, 93, 94, 98, 100, 101.

SUMMARY SHEET: KENYA

	Pre-	1950's			1960's			1970's		
	1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
<u>Development</u>										
Activity, Policy, and Program by Year of Action		X(1950)			P(1965) S(1968)					
<u>Organization</u>										
Governing Body							MOH			
Program Class; (Facilities)							+(MOH)			
<u>Approaches</u>										
							C,CM	I		
<u>Contraceptives</u>										
Most Accepted Method							IUD	O	O	
2nd Most Accepted Method							O	IUD	IUD	
<u>Personnel and Activities</u>										
Physician: I,P,F							X			
Paramedical: P,F;(O,C,IUD)							X			

Inducements

Sources: 2,3,6,18,19,98,100

SUMMARY SHEET: JAMAICA

	Pre-	1950's			1960's			1970's		
	1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
<u>Development</u>										
Activity, Policy, and Program by Year of Action	X						PS (1966)			
<u>Organization</u>										
Governing Body							MOH			
Program Class; (Facilities)							K (MOH)		+(MOH)	
<u>Approaches</u>										
							C		O, I	
<u>Contraceptives</u>										
Most Accepted Method							IUD	O	C	O
2nd Most Accepted Method							O	IUD	IUD	IUD
<u>Personnel and Activities</u>										
Physician: I, P, F							X			
Paramedical: P, F; (O, C, IUD)										
Community Health Aide: I, M									X	
Volunteer: U									X	
<u>Inducements</u>										

Sources: 1, 2, 4, 21, 31, 34, 35, 100

SUMMARY SHEET: DOMINICAN REPUBLIC

Pre-	1950's			1960's			1970's		
1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late

Development

Activity, Policy, and
Program by Year of Action

X(1960) X(1964) P(1967)
S(1968) S(1968)

Organization

Governing Body
Program Class; (Facilities)

A
K(S,MOH) + (U)

Approaches

C O

Contraceptives

Most Accepted Method
2nd Most Accepted Method

O O O
IUD IUD (IUD)

Personnel and Activities

Physician: I,P,F
Paramedical: O,M,P,F;(O,C,IUD)
Lay: I, Referral,P,F;(O,C,IUD)

X

X
[(I,M) (P)
X X

Inducements

Sources: 2,8,28,29,80,81,98

SUMMARY SHEET: TRINIDAD-TOBAGO

Pre- 1950	1950's			1960's			1970's		
	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late

Development

Activity, Policy, and
Program by Year of Action

X(1956)

GPS
(1967)

Organization

Governing Body
Program Class; (Facilities)

MOH
U(U)

Approaches

C

Contraceptives

Most Accepted Method
2nd Most Accepted Method

O
IUD

Personnel and Activities

Physician: I,P,F
Paramedical: I,P,F

X
X

Infrastructure

Sources: 2, 38, 39

SUMMARY SHEET: INDONESIA

	Pre-	1950's			1960's			1970's		
	1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
<u>Development</u>										
Activity, Policy, and Program by Year of Action	G					C(1966)	PS(1968)			
<u>Organization</u>										
Governing Body						MOH		A		
Program Class; (Facilities)						K(S,MOH)				
<u>Approaches</u>										
						C		O		
<u>Contraceptives</u>										
Most Accepted Method						IUD		O	C	
2nd Most Accepted Method						O		IUD	IUD	
<u>Personnel and Activities</u>										
Physician: I,P,F						X				
Paramedical: P,F;(O,C,IUD)								X		
Traditional Healers: I, M, F								X		
Lay: P,F										X
Motivators: I,M										X
<u>Inducements</u>										
						L				

Sources: 2,8,15,28,48,49,52,98,100,107

SUMMARY SHEET: MOROCCO

Pre-	1950's			1960's			1970's		
1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late

Development

Activity, Policy, and
Program by Year of Action

G(1966) PS(1968)

X(1970)

Organization

Governing Body
Program Class; (Facilities)

MOH
+(MOH)

Approaches

G

Contraceptives

Most Accepted Method
2nd Most Accepted Method

IUD
O

O
IUD

O
IUD

Personnel and Activities

Physician: I, P, F
Nurses: I, P, F

X

X

Inducement

Sources: 2, 3, 4, 15, 21, 22, 23

SUMMARY SHEET: REPUBLIC OF CHINA

	Pre-	1950's			1960's			1970's		
	1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
<u>Development</u>										
Activity, Policy, and Program by Year of Action				X(1958) G(1959)				P(1969)		
<u>Organization</u>										
Governing Body Program Class; (Facilities)										MOH U(U)
<u>Approaches</u>										
				C						I
<u>Contraceptives</u>										
Most Accepted Method								IUD	IUD	IUD
2nd Most Accepted Method								0	0	0
<u>Personnel and Activities</u>										
Physician: I,P,F				X						
Paramedical: P,F;(O,C)										X
Lay: I, Referral (Pre-pregnancy Workers) (Village Health Educators)										X
<u>Inducements</u>										
										L

Sources: 2,3,8,15,21,28,53,60,75,98,100,101

SUMMARY SHEET: GHANA

	Pre-	1950's			1960's			1970's		
	1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
<u>Development</u>										
Activity, Policy, and Program by Year of Action					X(1964) G(1966)	P(1969)		S(1970)		
<u>Organization</u>										
Governing Body					A					
Program Class; (Facilities)					K(MOH)					
<u>Approaches</u>										
							C	O	I	
<u>Contraceptives</u>										
Most Accepted Method							IUD	O	O	
2nd Most Accepted Method							O	IUD	IUD	
<u>Personnel and Activities</u>										
Physician: I,P,F							X			
Paramedical: M,P,F							X			
Lay: M,P,F							X			
Volunteer: I							X			
<u>Inducements</u>										
							L			

Sources: 2,6,8,9,15,16,28,98

SUMMARY SHEET: BOTSWANA

Pre- 1950	1950's			1960's			1970's		
	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late

Development

Activity, Policy, and
Program by Year of Action

GP(1970)
S(1971)

Organization

Governing Body
Program Class; (Facilities)

Approaches

CM,C,O

Contraceptives

Most Accepted Method
2nd Most Accepted Method

O O
IUD IUD

Personnel and Activities

Physician: I,P,F
Paramedical: P,F

X X

Inducements

Sources: 1,2,8,9

SUMMARY SHEET: COLOMBIA

Development	Activity, Policy, and Program by Year of Action			Organization	Governing Body Program Class: (Facilitated)	Approaches	Contractees	Most Accepted Method	2nd Most Accepted Method	Personnel and Activities	Physician: I.P.P. Parasitologist: F.R.; (O.C.IUD) Lay: "Gov't research field- worker": I. Kegerney Mentor (FPA) Commercial Vendor:	Inducement	Sources: 2, 3, 15, 20, 27, 28, 98, 105
	Pre-1950	1950's	1960's										
1970's	Pre-1950	1950's	1960's										
1970's	Pre-1950	1950's	1960's										

SUMMARY SHEET: PHILIPPINES

Pre-	1950's			1960's			1970's		
1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late

Development

Activity, Policy, and
Program by Year of Action

X(1960)

GPS(1970)

Organization

Governing Body
Program Class; (Facilities)

A
K(S,MOH) +(U)

Approaches

C,I,O

Contraceptives

Most Accepted Method
2nd Most Accepted Method

O	O	O	O
IUD	IUD	IUD	S

Personnel and Activities

Physician: I,P,F
Paramedical: P,F;(O,C,IUD)
Traditional Midwife I,M,F
Lay: M,P,F

X	
X	IUD
X	X
	X

Inducements

L,I L L

Sources: 2,8,28,53,60,64,65,66,98,100,101,107

SUMMARY SHEET: PUERTO RICO

Pre-1950 ^a	1950	1950 ^b	1960 ^a	1970 ^b
Early	Early	Early	Early	Early
MID	MID	MID	MID	MID
Late	Late	Late	Late	Late

Development

Activity, Policy, and Program by Year of Action

Organization

Governing Body
 (Type Class: (Packaged))

Approaches

Comparative

Most Accepted Method
 2nd Most Accepted Method

Personnel and Activities

Physician: I, P, F
 Biomedical: P, F

Indicators

Source: 2, 3, 7, 21

7

X

CM, O
 KDH
 + (U)
 O
 S

C

S (1970)

S (1967)

X (1956)

6

SUMMARY SHEET: THAILAND

	Pre-	1950's			1960's			1970's		
	1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
<u>Development</u>										
Activity, Policy, and Program by Year of Action				X(1959)	G(1960)			PS(1970)		
<u>Organization</u>										
Governing Body								A		
Program Class; (Facilities)								+(MOH)		
<u>Approaches</u>										
								CM,C,O	I	
<u>Contraceptives</u>										
Most Accepted Method						IUD		O	O	
2nd Most Accepted Method						S		IUD	S	
<u>Personnel and Activities</u>										
Physician: I,P,F								X		
Paramedical: P,F; (O,C,IUD, INJ)									X	(IUD,X, INJ)
Aux. midwife (fieldworker):										
P,F(O,IUD,INJ)										
Traditional midwife: I,M,F										
<u>Inducements</u>										

Sources: 1,2,7,9,28,76,77,78,79,98,100,101,106

Furthermore, the government is trying to raise quality through in service training. All junior high teachers spend one month a year (July) on inservice training, which includes pedagogy, psychology, and subject content study. In addition to this month of concentration, there are school level, grade level, and subject area meetings of teachers during the academic year (Lainer 1975, p. 105).

These problems and proposed solutions indicate that while the achievements of the Cuban educational efforts have been remarkable, particularly in adult education and the rapid expansion of primary and secondary school and the extension of schooling into rural areas, such education expansion -- even in a society as committed to education as Cuba -- is fraught with difficulty in countries where the availability of highly-trained teaching personnel is limited by the conditions of underdevelopment which preceded the Revolution. The shortage of educational personnel also reflects the overall shortage of skilled labor in the economy, and the shortage of adequate facilities in the schools reflects the overall material goods shortages in the Cuban economy. Furthermore, as the figures indicate, one of the principal reasons that there are great difficulties in providing schooling in Cuba is the Revolution's commitment to rural areas, areas where the population is thinly spread, transportation.. not particularly well-developed, and a deeply ingrained culture of traditional values inherited from the pre-Revolutionary social and economic structure.

Castro summarized the situation in the following way:

We face a really special situation in the coming years. Why? Because we are living through a transitional situation. We still don't have the new man and we no longer have the old one. The new man doesn't exist yet (Castro 1972).

SUMMARY SHEET: MEXICO

Pre-	1950's			1960's			1970's		
1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late

Development

Activity, Policy, and
Program by Year of Action

X(1959)

G(1964)

PS(1972)

Organization

Governing Body

Program Class; (Facilities)

Approaches

Contraceptives

Most Accepted Method

2nd Most Accepted Method

Personnel and Activities

Physician: I,P,F

Paramedical: future plan

Traditional Midwife

Inducements

A (policy)
MOH (prog.)
+(U)
O,C

O IUD
IUD O

X

X

L

L

Sources: 1,2,7,15,28,29,37,107

SUMMARY SHEET: HONG KONG

	Pre-	1950's			1960's			1970's		
	1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
<u>Development</u>										
Activity, Policy, and Program by Year of Action	X				G(1960)			S(1973) P(1973)		
<u>Organization</u>										
Governing Body Program Class; (Facilities)								MDE K(S,MDE)		
<u>Approaches</u>										
<u>Contraceptives</u>										
Most Accepted Method					IUD	IUD	O	O		
2nd Most Accepted Method					-	-	IUD	S		
<u>Personnel and Activities</u>										
Physician: I, P, F					X					
Paramedical: P, F; (O, C, INJ)							X			
Lay: P, F									X	
<u>Inducements</u>										
									L	

Sources: 1, 2, 7, 8, 9, 28, 40

SUMMARY SHEET: EL SALVADOR

	Pre-	1950's			1960's			1970's		
	1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late
<u>Development</u>										
Activity, Policy, and Program by Year of Action	X				X(1962)		G(1967)			P(1974)
<u>Organization</u>										
Governing Body Program Class; (Facilities)							A K(S,MOH)			
<u>Approaches</u>										
								C,CM,I		O
<u>Contraceptives</u>										
Most Accepted Method							IUD	O	O	
2nd Most Accepted Method							O	IUD	IUD	
<u>Personnel and Activities</u>										
Physician: I,P,F							X			
Paramedical: I,P,F; (O,C,IUD)										
"Outreach": P,F							X			
"Motivator": M							X			
<u>Inducements</u>										

Sources: 1,2,3,15,30,31

SUMMARY SHEET: SENEGAL

Pre-	1950's			1960's			1970's		
1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late

Development

Activity, Policy, and
Program by Year of Action

X(1960

G(1970) P(1974)

Organization

Governing Body
Program Class; (Facilities)

MOE
+(U)

Approaches

Contraceptives

Most Accepted Method
2nd Most Accepted Method

C

Personnel and Activities

Physician: I,P,F
Paramedical:
Nurse midwife (P,F)IUD, P

X

X

Inducements

Sources: 2,3,4,15,28,47,106

SUMMARY SHEET: GUATEMALA

Pre-	1950's			1960's			1970's		
1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late

Development

Activity, Policy, and
Program by Year of Action

X(1964) G(1968)

P(1975)

Organization

Governing Body
Program Class; (Facilities)

MOH
U(U)

Approaches

Contraceptives

Most Accepted Method
2nd Most Accepted Method

IUD	IUD	O	O	O
O	O	IUD	IUD	IUD

Personnel and Activities

Physician: I,P,F
Paramedical: P,F; (O,C)

X
X

Inducements

Sources: 2,3,8,15,28

SUMMARY SHEET: VIETNAM

Pre-	1950's			1960's			1970's		
1950	Early	Mid	Late	Early	Mid	Late	Early	Mid	Late

Development

Activity, Policy, and
Program by Year of Action

X(North,1963) X(South,1967) G(South,1973) P(North and South,1976)
S(North,1971)

Organization

Governing Body
Program Class; (Facilities)

U
U(U)

Approaches

Contraceptives

Most Accepted Method
2nd Most Accepted Method

Personnel and Activities

Physician: I,P,F
Paramedical:

Inducements

Sources: 1,2,8,9,15,60

REFERENCES

1. International Planned Parenthood Federation. Report to Donors October 1977: Program Development and Financial Statements 1976-1978. London
2. Nortman, D.L. and Hofstatter, E. Population and Family Planning Programs- G. Population Council Fact Book. 9th edition. The Population Council, New York, 1978.
3. Stamper, B.M. Population and Planning in Developing Nations, a Review of Sixty Development Plans for the 1970s. The Population Council, One Dag Hammarskjold Plaza, New York, New York, 10017.
4. United Nations Fund for Population Activities. Inventory of Population Projects in Developing Countries Around the World 1976/1977. New York.
5. Nortman, D.L. Population and Family Planning Programs: A Fact Book. 6th edition. The Population Council, New York, 1969.
6. Howe, C. International Planned Parenthood Federation World Survey: (3) Factors Affecting the Work of Family Planning Associations. IPPF 18-20 Lower Regent Street, London SW1Y, England, 1969.
7. Cuca, R. and Pierce, C.S. Experiments in Family Planning. A World Bank Research Publication. The Johns Hopkins University Press, Baltimore and London, 1977.
8. Watson, Walter B. (ed.). Family Planning in the Developing World, a Review of Programs. The Population Council, New York, 1977.
9. International Planned Parenthood Federation. Family Planning on Five Continents. IPPF 18-20 Lower Regent Street, London SW1Y 4PW, England, 1976.
10. International Bank for Reconstruction and Development, Population and Human Resources Division and Population Projects Department. Demographic Brief for Egypt. The World Bank, Washington, D.C., 1978.
11. International Bank for Reconstruction and Development, unpublished mission data.
12. Population Information Program, Population Reports, Family Planning Program, Series J, No. 1, August 1973, Johns Hopkins University, Hampton House, 624 Broadway, Baltimore, Maryland 21205.
13. International Bank for Reconstruction and Development, unpublished mission data.

14. International Planned Parenthood Federation. World Survey (1) Factors Affecting the Work of Family Planning Associations. IPPF, London, 1966.
15. Population Reference Bureau, World Population Growth and Response: 1965-1975, A Decade of Global Action. Population Reference Bureau, 1745 N Street, N.W., Washington, D.C., 20036, 1976.
16. Joyce, J.A. World Population - Basic Documents, Volume III - The Developing World. Oceana Publications, Inc., Dobbs Ferry, New York, 1976.
17. International Bank for Reconstruction and Development. Economic Analysis and Projections Department. World Tables, 1976. A World Bank Publication by Johns Hopkins University Press, Baltimore and London, 1976.
18. The World Bank, Population and Human Resources Division and Population Projects Department. Demographic Brief for Kenya. The World Bank, Washington, D.C., June, 1978.
19. International Bank for Reconstruction and Development - unpublished mission data.
20. Piotrow, P. (ed.). Draper World Population Fund Report, Successful Family Planning Programs, No. 4, Summer, 1977. Draper World Population Fund, 1120 19th Street, N.W., Washington, D.C., 20036, 1977.
21. Berelson, B. (ed.). Family Planning Programs, An International Survey. Basic Books, Inc., New York and London, 1969.
22. International Bank for Reconstruction and Development - unpublished mission data.
23. Djerassi, C. "Fertility Limitations Through Contraceptive Steroids in the People's Republic of China". Studies in Family Planning. Vol. 5, No. 1, pp. 13-30. The Population Council, New York, January, 1974.
24. International Bank for Reconstruction and Development. Unpublished mission data.
25. The World Bank, Population and Human Resources Division and Population Projects Department. Demographic Brief for Tunisia. The World Bank, Washington, D.C., 1978.

26. Ebanks, G.E. and Gilkes, L. Country Profile: Barbados. The Population Council, New York, December, 1973.
27. Sanin, E.P. Country Profile: Colombia. The Population Council, New York, October, 1976.
28. Watson, W.B. and Lapham, R.J. (eds.). "Family Planning Programs: World Review 1974". Studies in Family Planning. Vol. 6, No. 8. The Population Council, New York, August, 1975.
29. McCoy, T. The Dynamics of Population Policy in Latin America. Ballinger Press, Cambridge, Massachusetts, 1974.
30. Ickis, J.C. and Austin, J.E. The Integral Population Policy of El Salvador. Speech delivered at Harvard University and published by INCHE, Managua, Nicaragua, 1976.
31. United States Agency for International Development, Office of Population, Family Planning Statistics Division. Family Planning Service Statistics, Annual Report, 1976.
32. U.S. Department of Commerce, Bureau of the Census. Country Demographic Profile, Guatemala. 1976.
33. The World Bank, Population and Human Resources Division and Population Projects Department. Demographic Brief for Colombia. The World Bank, Washington, D.C., 1978.
34. Ebanks, G.E. Country Profile: Jamaica. The Population Council, New York, April, 1971.
35. The World Bank, Population and Human Resources Division and Population Projects Department. Demographic Brief for Jamaica. The World Bank, Washington, D.C., 1978.
36. International Bank for Reconstruction and Development. Unpublished mission data.
37. United Nations Fund for Population Activity. UNFPA Newsletter, Volume 4, No. 7, July, 1978.
38. Khanna, S. and Awon, M.P. Country Profile: Trinidad-Tobago. The Population Council, New York, August, 1971.
39. International Bank for Reconstruction and Development - unpublished mission data.

40. The Population Council. Country Profile: Hong Kong. The Population Council, New York, November, 1969.
41. Watson, W.B. and Lapham, R.J. (eds.). "The People's Republic of China". Studies in Family Planning. Vol. 6, No. 8, pp. 320-322. The Population Council, New York, August, 1975.
42. Chen, P.C. "China's Population Program at the Grass Roots Level". Studies in Family Planning. Vol. 4, No. 8, pp. 219-227. The Population Council, New York, August, 1973.
43. Chen, P.C. "Lessons from the Chinese Experience: China's Planned Birth Program and Its Transferability". Studies in Family Planning. Vol. 6, No. 10, pp-354-366. The Population Council, October, 1975.
44. Visaria, P. and Jain, A.K. Country Profile: India. The Population Council, New York, May, 1969.
45. Churchill, E. (ed.). Population and Development Review 4(2): 1978.
46. International Bank for Reconstruction and Development - unpublished mission data.
47. Personal Communication.
48. Hull, T.H., Hull, V.J. and Singarimban, M. "Indonesia's Family Planning Story: Success and Challenge". Population Bulletin. 32(6): 1977.
49. The World Bank, Population and Human Resources Division and Population Projects Department. Demographic Brief for Indonesia. The World Bank, Washington, D.C., 1978.
50. Population Information Center. Population Report, Family Planning Programs. Series J, No. 5, July 1975. Population Information Center, Johns Hopkins University, Hampton House, 624 Broadway, Baltimore, Maryland, 21205.
51. International Bank for Reconstruction and Development - unpublished mission data.
52. Soewondo, N., Djoewari, O., and Ryder, B. Country Profile: Indonesia. The Population Council, New York, April, 1971.
53. Keeny, S.M. (ed.). "East Asia Review, 1972". Studies in Family Planning. Vol. 4, No. 5. The Population Council, New York, May, 1973.

54. Marzuki, A. and Peng, J.Y. Country Profile: Malaysia. The Population Council, New York, July, 1970.
55. Peng, J.Y. and Preble, E. Country Profile: Malaysia. The Population Council, New York, August, 1975.
56. International Bank for Reconstruction and Development - unpublished mission data.
57. Han, D.W. et. al. Country Profile: Republic of Korea. The Population Council, New York, April, 1970.
58. Westinghouse Population Center. Summary Report of the Global Patterns of Contraceptive Distribution in the Private Sector in Selected Countries. The Westinghouse Population Center, Columbia, Maryland, 1972.
59. Anderson, J.E., Cheng, M.C. and Wan, F.K. "A Component Analysis of Recent Fertility Decline in Singapore". Studies in Family Planning. Vol. 8, No. 11. The Population Council, New York, November, 1977.
60. Keeny, S.M. (ed.). "East Asia Review, 1973". Studies in Family Planning. Vol. 5, No. 5. The Population Council, New York, May, 1974.
61. The Singapore Family Planning and Population Board. Family Planning 1965-1967. The Government of Singapore, 1967.
62. The Singapore Family Planning and Population Board. Family Planning in Singapore, SFPPB, 1967.
63. The Singapore Family Planning and Population Board. 11th Annual Report. SFPPB.
64. Concepción, M. Country Profile: Philippines. The Population Council, New York, June, 1970.
65. International Bank for Reconstruction and Development, unpublished mission data.
66. Philips, J.F. (ed.). "Continued Use of Contraception Among Philippine Family Planning Acceptors: A Multi-variate Analysis". Studies in Family Planning. Vol. 9, No. 7, pp. 182-192. The Population Council, New York, July, 1978.
67. Government of Ceylon, National Planning Council. The Ten-Year Plan. The Government of Ceylon (Sri Lanka), 1959.

68. The World Bank, Population and Human Resources Division and Population Projects Department. Demographic Brief for Sri Lanka. The World Bank, Washington, D.C., 1978.
 69. International Bank for Reconstruction and Development, unpublished mission data.
 70. Population Information Center. Population Reports. Series J, No. 16, p. J-311, March, 1977. The Population Information Center, Johns Hopkins University, Hampton House, 624 Broadway, Baltimore, Maryland, 21205.
 71. The World Bank, Population and Human Resources Division and Population Projects Department. Demographic Brief for Philippines. The World Bank, Washington, D.C.
 72. Population Information Center. Population Reports. Series J, No. 6, Table. September, 1975. The Population Information Center, Johns Hopkins University, Hampton House, 624 Broadway, Baltimore, Maryland, 21205.
 73. ICARP, ICARP Bulletin No. 1, September, 1978.
 74. Chen, P.C. Population and Health Policy in the People's Republic of China. Monograph No. 9, Interdisciplinary Communications Program. December, 1976.
 75. Keeny, S.M. Country Profile: Taiwan. The Population Council, New York, February, 1970.
 76. Perkins, G.W. et. al. Country Profile: Thailand. The Population Council, New York, May, 1969.
 77. Unhanand, M. et. al. Country Profile: Thailand. The Population Council, New York, March, 1972.
 78. The Population Council. Studies in Family Planning. The Population Council, New York, August, 1978.
 79. International Bank for Reconstruction and Development, unpublished mission data.
 80. Montas, H.P. Country Profile: Dominican Republic. The Population Council, New York, January, 1973.
 81. International Bank for Reconstruction and Development, unpublished mission data.
-

82. Hardee, J.G. and Satterthwaite, A.P. Country Profile: Pakistan. The Population Council, New York. March, 1970.
83. International Bank for Reconstruction and Development - unpublished mission data.
84. International Bank for Reconstruction and Development, unpublished mission data.
85. Arthur, W.B. and McNicoll. "Survey Population and Development in Bangladesh". Population and Development Review. Vol. 4, No. 1, pp. 23-80, 1978.
86. Friesen, J.K. Country Profile: Iran. The Population Council, New York, 1969.
87. Friesen, J.K. and Moore, R.V. Country Profile: Iran. The Population Council, New York, 1972.
88. Population Information Center. "Law and Policy". Population Reports. Series E, No. 4, March, 1976. The Population Information Center, Johns Hopkins University, Baltimore, Maryland.
89. Taylor, D. and Thapa, R. Country Profile: Nepal. The Population Council, New York, 1972.
90. Management Sciences for Health. Integrated Basic Health Services, Nepal. Management Sciences for Health, Cambridge, Massachusetts, 1975.
91. Lee, L. "Law and Family Planning". Studies in Family Planning. Vol. 2, No. 4, pp. 81-98. The Population Council, New York, April, 1971.
92. Veatch, R.M. "Governmental Population Incentives: Ethical Issues at Stake". Studies in Family Planning. Vol. 8, No. 4, pp. 100-108. The Population Council, New York, April, 1977.
93. Anderson, L.S. Country Profile: Turkey. The Population Council, New York, January, 1970.
94. Fisek, N.H. "An Integrated Health/Family Planning Program in Etimesgut District, Turkey". Studies in Family Planning. Vol. 5, No. 7, pp. 210-220. The Population Council, New York, July, 1974.
95. Wright, N.H. "Sri Lanka: The Impact of Allowing Paramedical Prescription and Resupply of Oral Contraceptives". Studies in Family Planning. Vol. 6, No. 4, pp. 85-101. The Population Council, New York, April, 1975.

96. International Bank for Reconstruction and Development. Unpublished midline data.
97. Cuca, R. and Bean, L.L. Family Planning in Pakistan. Population and Human Resources Division and Development Economics Department, International Bank for Reconstruction and Development, Washington, D.C., February, 1975.
98. Nortman, D. "Population and Family Planning Programs: A Factbook". Second edition. Reports on Population/Family Planning. No. 5. The Population Council, New York, July, 1970.
99. Nortman, D. "Population and Family Planning Programs: A Factbook". Eighth edition. Reports on Population/Family Planning. No. 2. The Population Council, New York, October, 1976.
100. Green, S. The Relative Importance of Governmental and Commercial Channels in the Distribution of Contraceptive Supplies. Population and Nutrition Projects Department, The World Bank, Washington, D.C., August, 1974.
101. Madhok, R.N. Manpower Requirements for Family Planning Programs. Population and Nutrition Projects Department, The World Bank, Washington, D.C., December, 1974.
102. Xenos, C. Country Profile: Mauritius. The Population Council, New York, September, 1970.
103. Castadot, R. and Laraqui, A. Country Profile: Morocco. The Population Council, New York, September, 1973.
104. King, T. (coordinating author). Population Policies and Economic Development. The World Bank, Washington, D.C., 1974.
105. Saunders, L. (ed.) IEC Strategies: Their Role in Promoting Behavior Change in Family Planning and Population Planning. East-West Center, Honolulu, Hawaii, July, 1977.
106. Paxman, J.M.; Lee, L.T. and Hopkins, S.B. Expanded Roles for Non-Physicians in Fertility Regulation: Legal Perspective. Law and Population Monograph Series (#41). Law and Population Program, The Fletcher School of Law and Diplomacy, Medford, Mass., 1976.
107. Rogers, E.M. and Solomon, D.S. Traditional Initiatives as Family Planning Communicators in Asia. East-West Communication Institute, Honolulu, Hawaii, June 1975.

RECENT PAPERS IN THIS SERIES

<u>No.</u>	<u>TITLE OF PAPER</u>	<u>AUTHOR</u>
314	The Changing Composition of Developing Country Exports	H. Chenery D. Keesing
315	Urban Growth and Economic Development in the Sahel: Prospects and Priorities	M. Cohen
316	World Trade and Output of Manufacturers: Structural Trends and Developing Countries' Exports	D. Keesing
317	Cuba: Economic Change and Education Reform 1955-1974	M. Carnoy J. Wertheim (consultants)
318	Sources of Fertility Decline: Factor Analysis of Inter-Country Data	R. Faruqee
319	Educational and Economic Effects of Promotion and Repetition Practices	W.D. Haddad
320	Small Farmers and the Landless in S South Asia	I.J. Singh
321	Fruit and Vegetable Exports from the Mediterranean Area to the EEC	R.D. Hunt
322	Ability in Pre-Schoolers, Earnings, and Home-Environment	R. Grawe
323	Priorities in Education: Pre-School; Evidence and Conclusions	M. Smilansky (consultants)
324	Tropical Root Crops and Rural Development	T. Goering
325	Costs and Scale of Bus Services	A.A. Walters
326	Social and Cultural Dimensions of Tourism	R. Noronha (consultant)
327	Investment in Indian Education: Uneconomic	S. Heyneman
328	Nutrition and Food Needs in Developing Countries	O. Knudsen P.L. Scandizzo

<u>No.</u>	<u>TITLE OF PAPER</u>	<u>AUTHOR</u>
329	The Changing International Division of Labor in Manufactured Goods	B. Balassa
330	Application of Shadow Pricing to Country Economic Analysis with an Illustration from Pakistan	L. Squire I.M.D. Little
331	A Survey of the Fertilizer Sector in India	B. Bumb (consultant)
332	Monitoring and Evaluation in the PIDER Rural Development Project - Mexico	M. Cernea
333	Determinants of Private Industrial Investment in India	A. Pinell-Siles
334	The "Graduation" Issue in Trade Policy Toward LDCs	I. Frank (consultant)
335	Balancing Trickle Down and Basic Needs Strategies: Income Distribution Issues in Large Middle-Income Countries with Special Reference to Latin America	M. Selowsky
336	Labor Force, Employment and Labor Markets in the Course of Economic Development	L. Squire
337	The Population of Thailand: Its Growth and Welfare	S. Cochrane
338	Capital Market Imperfections and Economic Development	V.V. Bhatt A.R. Roe
339	Behavior of Foodgrain Production and Consumption in India, 1960-77	J. Sarma
340	Electric Power Pricing Policy	M. Munasinghe
341	State Intervention in the Industrialization of Developing Countries: Selected Issues	A. Choksi
342	Policies for Efficient and Equitable Growth of Cities in Developing Countries	J. Linn
343	The Capital Goods Sector in LDCs: A Case for State Intervention?	J. Datta Mitra
344	International Technology Transfer: Issues and Policy Options	Z. Stewart

